

Department of Natural Resources

February 12, 2024

Andy Azacarraga M.A. Concrete Construction, Inc. 2323 River Road Grand Junction, CO 81505

RE: Cole Pit, Permit No. M-2004-020, Proposed bond calculation SI-2

Dear Mr. Azacarraga:

This reclamation cost update was based on site conditions observed at the January 24, 2024 site inspection. The last bond update was conducted in 2018 in conjunction with SI-1. 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.

Below is a table summarizing input values that have been used. 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 permit.

Task	Form Used	Justification
01a	Demo	Remove Scale house and scale
		10' x 10' x 10' on side disposal, 200 'push
02a	Dozer	Regrade highwalls, cut/fill = 14,986 BCY @ 70'Push
		10'H x 1000LF @ 1H:1V to a 3H: 1V = 926 CCY
		15'H x 2000LF @ Vert to 3H: 1V = 6,248 BCY
		15'H x 900 LF @ Vert to 3H: 1V = 2,812 BCY
		Misc pile grading in Phase 1 = 5,000 CCY
03a	Truck	Apply Overburden 68 ac @ 6" min = 54,853 CCY
		100 ac affected – 8 ac reclaimed – 24 ac prev. topsoiled = 68 ac
		600 LF Load/Carry and Avg 50'push to spread



03b	Ripper	Decompact Pit floor/stockpile areas ~ 56 ac
04a	Truck	Topsoil affected lands 68 ac @ 6" = 54,853 CCY 100 ac affected – 8 ac reclaimed – 24 ac prev. topsoiled = 68 ac 600 LF Load/Carry and Avg 50'push to spread
05a	Reveg	Reveg Mix B – Slopes 12 ac
05b	Reveg	Reveg Mix A - Pit Floor 80 ac
05c	Reveg	Reveg Mix A – 8ac previously reclaimed
10a	Mob	Initial Mobilization – Updated Fleet used 3 x D8 Dozer 1 x 972 Loader 3 Dump Truck, 12 C.Y Drill seeder and Power Mulcher
10b	Mob	Secondary Mobilization

Please provide feedback on the Divisions calculation by April 12, 2024. If the Division does not receive a response by **Friday, April 12, 2024** then the Division will issue a Notice of Surety Increase SI-2 at the proposed amount of \$311,882 for a total bond amount of **\$711,742** to be held.

Please feel free to contact me with any further questions.

Sincerely,

Amy Geldell

Amy Yeldell Environmental Protection Specialist

Ec: Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Task description:		Post inspection u	ıpdate				
Site: Cole Gra	vel Pit	Per	rmit Action:	1-24	Permit/Job	#: <u>M2004020</u>	
PROJECT Task #: Date: User:	IDENTIFIC ACY 2/9/2024 ACY	CATION State: County:	Colorado Mesa		Abbreviation: Filename:	None M020-ACY	

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	<u> </u>
I dok	Description	Used	Size	Hours	Cost
01a	Demo	DEMOLISH	1	2.00	\$194
02a	Regrade all slopes to 3H: 1V or less	DOZER	3	17.09	\$22,629
03a	Apply overburden to affected lands	TRUCK1	1	106.11	\$86,512
03b	Decompact pit floor	RIPPER	3	29.08	\$39,000
04a	Apply topsoil to affected lands	TRUCK1	1	106.11	\$90,330
05a	Revegetation Mix B - 12 ac of slope area	REVEGE] 1	20.00	\$35,953
05b	Revegetation of Mix A - 80 acres on pit floor	REVEGE	1	130.00	\$253,337
05c	Revegetation of Mix A - 8 ac previsouly reclaimed	REVEGE	1	12.00	\$24,792
10a	Initial mobilization	MOBILIZE	1	3.06	\$8,919
10b	Secondary mobilization	MOBILIZE	1	3.06	\$1,772
		<u>SUBTO</u>	TALS:	428.51	\$563,438

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$11,381
Performance bond:	1.05	Total =	\$5,916
Job superintendent:	214.26	Total =	\$13,944
Profit:	10.00	Total =	\$56,344
		TOTAL O & P =	\$87,585
		CONTRACT AMOUNT (direct + O & P) = $($	\$651,023

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$27,668
Reclamation management and/or administration:	5.00		\$32,551
CONTINGENCY:	0.00	Total =	\$0
	TOTAL IN	DIRECT COST =	\$148,305
TOTAL BO	ND AMOUNT (di	irect + indirect) =	\$711,743

DEMOLITION WORK

rusk desemptio	on: Demo	1					
Site: Cole Gravel	Pit	Permit Action: 1-24			Permit/Job#: M2004020		
PROJECT IDENTI	FICATION						
Task #: 01A Date: 2/9/2024 User: ACY Agency	Co or organization nan	State: <u>Colorado</u> unty: <u>Mesa</u> ne: <u>DRMS</u>		Abbreviat Filena	ion: <u>Non</u> me: <u>M02</u>	e 20-01a	
<u>UNIT COSTS</u>				Location	<u>adjustmen</u>	<u>t: 89.80 %</u>	
UNIT COSTS Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Location Unit	adjustmen Unit Cost	<u>t: 89.80 %</u> Total Cost	
UNIT COSTS Structure or Item Description Scale house	Dimensions 10x10x10	Demolition Menu SelectionBldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	Quantity 1,000.00	Location Unit CF	adjustmen Unit Cost \$0.22	t: 89.80 % Total Cost \$216.40	

		Subtotal		(adjusted for	
Job Hours:	2.00	(unadjusted):	\$216.40	location):	\$194.33

BULLDOZER WORK

Та	ask descrip	tion:	CTas	skDescriptio	n			
_	CSite			Per	mit Action:	CJobAction	Permit/Job#:	CPermitID
<u>P</u>	ROJECT	' IDEN'	<u>TIFICATI(</u>	<u> </u>				
	Task #:	TTT		State:	CState		Abbreviation:	CAbbreviation
	Date:	mmdd	VVVV	County:	CCounty		Filename:	CFilename
	User:	UUU		5			-	
	Ag	ency or	organization	name: <u>CA</u>	AgencyName			
H	OURLY	EQUII	PMENT CO	<u>DST</u>				
	Basic Ma	chine:	Cat D8T - 8	SU				
	Horsep	ower:	310					
	Blade	Type:	Semi-Unive	ersal				
	Attach	ment:	3-shank rip	per				
	Shift	Basis:	1 per day					
	Data So	ource:	(CRG)					
C	ost Breakd	<u>own</u> :						
						<u>Utilization %</u>		
(Ownership	Cost/Ho	our:		\$241.38	NA		
-	Operating	Cost/Ho	our:		\$143.92	100		
Ri	ipper own.	Cost/Ho	our:		\$14.11	NA		
	Ripper op.	Cost/Ho	our:		\$1.86	25		
	Operator	Cost/Ho	our:		\$40.04	NA		
M	IATERIA	L QUA	<u>ANTITIES</u>					
	Initial Vol	ume:	14,986					
	Swell fa	ctor:	1.330		_			
	Loose vol	ume:	19,931 LCY					
So	ource of est	timated [•]	volume:	Reduce a	ll slopes to 3	H:1V or less		
So	ource of es	timated	swell factor:	Cat Hand	book			
ц			UCTION					
<u>11</u>				-				
A	verage pus	h distan	ce: roduction:	/U teet	V/hr			
				<u>1,075.7 LC</u>	1/111			
M	laterials co	nsistenc	y description	: <u>Compa</u>	cted fill or e	mbankment 0.9		
A A	verage pus verage site	h gradie altitude	nt: 0% : $5,150$	feet				
М	laterial wei	ght:	2,900	lbs/LCY				
W	eight desc	ription:	Decor	nposed rock	- 50% Rock	, 50% Earth		
Jo	b Conditio	on Correc	ction Factor			Source		
	_	Oper	ator Skill:	0.	750	(AVG.)		
	Ma	terial co	nsistency:	0.	900	(CAT HB))		
		. .			000	(~~~ · · · ·		
		Dozin	g method:	1.	000	(GEN.)		

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: 38	8.70 LCY/hr	
Adjusted fleet production: 11	66.1 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$1.135/LCY

Total job time:	17.09 Hours
Total job cost:	\$22,629

TRUCK/LOADER TEAM WORK

Task description:	Apply o	verburden	to aff	ected lands			
Site: Cole Gravel Pit		Permit	Actio	on: <u>1-24</u>		Permit/Job#: <u>M</u>	2004020
PROJECT IDENT	TIFICATION	[
Task #: $03A$ Date: $2/12/20$ User:ACY	24	State: <u>C</u> County: <u>N</u>	Colora Mesa	ado	Ab	breviation: <u>Not</u> Filename: <u>M0</u>	ne 20-03a
Agency or o	rganization nar	ne: DRM	S				
HOURLY EQUIP	MENT COST	<u>r</u>			Shift bas	sis: <u>1 per day</u>	
]	Equipment Descri	ption		
Tr	uck Loader Tea	m -Truck:	Ger	neric 12-18 cy, 6x4	4		
Suppor	t Equipment I	-Loader:	CA' NA	Г 972Н			
-Dump Area: Cat D8T - 8SU							
Road Mai	ntenance – Mot	or Grader:	NA				
	-Wa	ter Truck:	NA				
Cost Breakdown:	Truck/Loa	ader Team		Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	NA	25	NA	NA
Ownership cost/hour:	\$26.39	\$57	7.78	NA	\$241.38	NA	NA
Operating cost/hour:	\$64.76	\$56	5.23	NA	\$35.98	NA	NA
%Utilization-riper:	NA		0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0	0.00	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$(0.00	NA	\$0.00	NA	NA
Operator cost/hour:	\$24.82	\$35	5.97	NA	\$40.04	NA	NA
Unit Subtotals:	\$115.97	\$149	9.98	NA	\$317.40	NA	NA
Number of Units:	3		1	0	1	0	0
Group Subtotals:	Work:	\$497.89		Support:	\$317.40	Maint:	\$0.00
Total work team cost	hour: <u>\$815.29</u>)					
	NUTURE						
<u>MATERIAL QUA</u>	NIIIES						
Initial volume:	54,853	0	CCY	Swell	factor: <u>1.125</u>		
Loose volume:	61,71	.0	LCY				
Sour	ce of estimated	volume:	$\frac{68}{Cat}$	c @ 6"			
Source o	Material Purch	ase Cost:	<u>\$0.00</u>	<u>апидоок</u>)			
	To	otal Cost:	\$0.00)			
HOUKLY PKOL	JUCTION						
Truck Capacity:							
<u>Iruck Payload (weigi</u> Material we	<u>it) Basis:</u> ight: 2 550			Pounds/LCY			
Descrip	tion: $2,000$	Dry packed					
Rated Pay	load: 50,300			Pounds			
Payload Capa	icity: 19.73			LCY			

Truck Bed (volume) Basis:						
Struck Volume:	12.00 L	.CY				
Heaped Volume:	18.00 L	.CY				
Average Volume:	15.00 L	.CY				
Adjusted Volume:	18.00 L	.CY				
·						
Final	Truck Volume H	Based on Number of	Loader Passes:	12.32	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class: <u>N</u>	A	_
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dir	t mixtures (100	-120%) 1.100		_
Adjusted Capacity:	6.160	LCY				
Job Condition Corrections:	<u>.</u>	Si	te Altitude (ft.): <u>4</u>	5150 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB	3)		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.830	0.830				
• • • • • • • • •					_	
Loading Tool Cycle Time:	Number	of Loading Tool Pas	sses Required to	Fill Truck:	2 1	basses
Excavators and Front Shove	<u>ls:</u>					
Machine Cycle Time v	s. Job Condition	Rating: <u>NA</u>				
Selected Value	within this Basic	Rating: NA				
Track Loaders –	Material Descrip	otion:				
Cycle Time Elements (min.):						
Load: NA	Ma	neuver: NA		Dump: 0.100		
Wheel and Track Loaders -	Unadjusted Bas	ic Loader Cycle Tin	ne (load dump r	maneuver): 0	525 min	ites
Cycle Time Eactors			ie (ieuu, uump, i	Eactor (min)	Source	
Material:	Material 3/4" t	o 6" diameter 0.00			(Cat HB)	_
Stocknile:	Conveyor or d	ozer niled 10 ft hig	n or less 0.01	0.000	(Cat HB)	_
Truck Ownership:	Common owne	ership of trucks and	loaders -0.04	-0.040	(Cat HB)	_
Operation:	Constant opera	ation -0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal target	t 0.00		0.000	(Cat HB)	-
Dump Turget.	i tollillar target	Net Cycle Tim	e Adjustment.	-0.070	minutes	_
		Adjusted Loade	er Cycle Time	0.070	minutes	
		Net Load Ti	ime per Truck	0.555	minutes	
		The Loud II		01000	minutes	
Truck Cycle Time:						
Truck Exchange Time	: 0.50	Minutes	Adjusted	for site altitude:	0.500	Minute
Truck Load Time	: 0.555	Minutes	Adjusted	for site altitude:	0.555	Minute
ck Maneuver and Dump Time	: 0.90	Minutes	Adjusted	for site altitude:	0.900	Minutes
Truck Travel (Haul & Return	n) Time:	Road Condition: S	loft mitted dirt m	o maintenance or w	422 4	

Haul Ro	oute:							
Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	600.0	0	1.00	8.00	9.00	1249	0.515	
Paturn 1	Poute				Haul Time:	0.515	minutes	
Seg #	Haul	Distance	Grade (%)	Roll Res	Total Res	Velocity	Travel	
	(Ft)	Distance	Grade (70)	(%)	(%)	(fpm)	Time (min)	
1	600.0	0	-1.00	8.00	7.00	2555	0.266	
				Total Tru	Return Time: ck Cycle Time:	0.266 2.736	minute minute	S S
Loading To Pro Truck Unit Pro	ool unit duction duction	700.66	LCY/Hour		Adjusted for j	ob efficiency:	581.55	LCY/Hour
		270.18	LCY/Hour		Adjusted for j	ob efficiency:	224.25	LCY/Hour
Optimal No. of '	Trucks:	3	Truck(s)		Selected Num	ber of Trucks:	3	Truck(s)
			Adjuste	ed hourly true	k team production	on: 672.	.74 LCY	/Hour
			Adjusted sing	le truck/loade	er team production	on: 581.	. <u>55</u> LCY	/Hour
			Adjusted multip	le truck/loade	er team production	on: 581.	. <u>55</u> LCY	/Hour
JOB T	IME AI	ND COST						
Flee	et size:	1	Team(s)	r	Fotal job time:	106.1	1 Ho	ours
Uni	it cost: _	\$1.402	/LCY		Total job cost:	\$86,51	12	

BULLDOZER RIPPING WORK

Site: Cole Gravel Pit Permit Action: 1-24 Permit/Job#: M200 PROJECT IDENTIFICATION Task #: 03B State: Colorado None Date: 2/12/2024 County: Mesa Mone Filename: M0204 User: ACY Agency or organization name: DRMS MORNEX M0204 HOURLY EQUIPMENT COST Basic Machine: Cat D8T - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: \$1413.92 100 Ownership Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$144.11 NA Operating Cost/Hour: \$144.50 NA Operator Cost/Hour: \$14.4.00 NA Operator Cost/Hour: \$143.92 100 Operator Cost/Hour: \$144.6.90 NA Total Unit Cost/Hour: \$144.6.90 NA Total Vinit Cost/Hour: \$143.06.69 Matemate Methods: eismic: NA Bank Volume: MA </th <th>03b</th>	03b	
PROJECT IDENTIFICATION Task #: 03B State: Colorado Abbreviation: None Date: 2/12/2024 County: Mesa Mozo- User: ACY Agency or organization name: DRMS Agency or organization name: DRMS HOURLY EQUIPMENT COST Horsepower: 310 Ripper Attachment: 3-Shank Ripper Bift Basis: 1 per day Data Source: (CRG) Cost Breakdown: \$143.92 100 Ripper Ownership Cost/Hour: \$143.92 100 Ripper Operating Cost/Hour: \$143.92 100 Operator Cost/Hour: \$144.6.90 Total Unit Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Maternate Methods: Selected estimating method: Area Area: 56.00 acres Rip Depth (ft): 2.00 Volume: NA Area: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Source of estimated quantity:	<u>03b</u>	
Task #: 03B State: Colorado Abbreviation: None Date: 2/12/2024 County: Mesa Filename: M020- User: ACY Agency or organization name: DRMS Filename: M020- Agency or organization name: DRMS HOURLY EQUIPMENT COST Horsepower: 310 Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Operating Cost/Hour: \$14.11 NA Nipper Ownership Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.00 NA Total Unit Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 Material Methods: Area Smic: NA Bank Volume: NA BCY NA Aterai 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 <	<u>03b</u>	
Date: 2/12/2024 County: Mesa Filename: M020- User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D8T - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$14.11 NA Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.4.04 NA Total Unit Cost/Hour: \$14.690 Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$14,340.69 MATERIAL QUANTITIES Selected estimating method: Area Area: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates	<u>-03b</u>	
User: ACY Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat DST - 8SU Basic Machine: Cat DST - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$1413.92 100 Ripper Ownership Cost/Hour: \$14.11 NA Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.4.11 NA Operator Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Total Unit Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: mic: NA Bank Volume: NA BCY NA Mrea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates <td></td>		
Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D8T - 8SU Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$143.92 100 Ripper Operating Cost/Hour: \$143.92 100 Operator Cost/Hour: \$14.41 NA Ripper Operating Cost/Hour: \$14.46.90 Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$13,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: mic: NA Bank Volume: NA Mrea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates		
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Basic Machine: Cat D8T - 8SU Horsepower: 310 Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$144.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.400 NA Operator Cost/Hour: \$14.400 NA Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: mic: NA Bank Volume: NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Gource of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates		
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Cost Breakdown: Utilization % Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$143.92 100 Ripper Operating Cost/Hour: \$143.92 100 Operator Cost/Hour: \$7.45 100 Operator Cost/Hour: \$446.90 NA Total Unit Cost/Hour: \$446.90 NA Total Fleet Cost/Hour: \$1,340.69 NA MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Ma Bank Volume: NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates		
Cost Breakdown: Utilization % Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.04 NA Total Unit Cost/Hour: \$440.04 NA Total Unit Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 Total Fleet Cost/Hour: \$14,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Area NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Gource of estimated quantity: Staff estimates Staff estimates Staff estimates		
Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$7.45 100 Operator Cost/Hour: \$446.90 Total Unit Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: selected estimating method: Area Alternate Methods: NA Bank Volume: NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates		
Ownership Cost/Hour: \$241.38 NA Operating Cost/Hour: \$143.92 100 Ripper Ownership Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$14.11 NA Operator Cost/Hour: \$14.11 NA Operator Cost/Hour: \$40.04 NA Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: mic: NA Bank Volume: NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates		
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Ripper Ownership Cost/Hour: \$14.11 NA Ripper Operating Cost/Hour: \$7.45 100 Operator Cost/Hour: \$40.04 NA Operator Cost/Hour: \$446.90 Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: NA Bank Volume: NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates Staff estimates Staff estimates		
Name State		
Operator Cost/Hour: \$40.04 NA Total Unit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Bank Volume: NA mic: NA BCY NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity:		
Total Onit Cost/Hour: \$446.90 Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Bank Volume: NA BCY NA acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates Staff estimates		
Total Fleet Cost/Hour: \$1,340.69 MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods: Selected estimating method: NA mic: NA BCY NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity:		
MATERIAL QUANTITIES Selected estimating method: Area Alternate Methods:		
Alternate Methods: mic: NA Bank Volume: NA BCY NA 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates		
NA Bank Volume: NA BCY NA rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates		
rea: 56.00 acres Rip Depth (ft): 2.00 Volume: 180,693 Source of estimated quantity: Staff estimates		
Source of estimated quantity:Staff estimates	BCY or	
HOURLY PRODUCTION		
Seismic:		
Seismic Velocity: NA feet/second		
Aroos		
Area Average Rinning Denth: 2 00 feet/pass		
Average Ripping Width: 7.08 feet/pass		
Average Ripping Length: 200.00 feet/pass		
Average Dozer Speed: 88.00 feet/minute		
Average Maneuver Time: 0.25 minutes/pass		
Production per unit area: 0.773 acres/hour		
Job Condition Correction Factors		
Unadjusted Hourly Unit Production: 0.773 Acres/hr		
Site Altitude: 5,150 feet		
Altitude Adj: 1.00 (CAT HB)		
Job Efficiency: 0.83 (1 shift/day)		
Net Correction: 0.83 multiplier		
Adjusted Hourly Unit Production: 0.64 Acres/hr		
Adjusted Hourly Fleet Production: 1.93 Acres/hr		
JOB TIME AND COST		
Fleet size: 3 Grader(s) Total job time: 29.09 H	Hours	

TRUCK/LOADER TEAM WORK

Task description:	Apply to	opsoil to aff	ected	lands			
Site: Cole Gravel Pit		Permit	Actio	on: <u>1-24</u>		Permit/Job#: <u>M</u>	2004020
PROJECT IDEN	FIFICATION						
Task #: 04A State: Colorado Abbreviation: None							ne
Date: 2/9/202	24	County: N	Mesa			Filename: M0	20-04a
User: <u>ACY</u>							
Agency or o	organization nar	ne: DRM	S				
HOURLY EQUIP	MENT COST	<u>r</u>			Shift bas	sis: <u>1 per day</u>	
]	Equipment Descri	ption		
Tr	uck Loader Tea	m -Truck:	Ger	eric 12-18 cy, 6x4	4		
Suppo	rt Fauinment -I	-Loader:	CA NA	I 9/2H			
Suppo	-Dı	imp Area:	Cat	D8T - 8SU			
Road Ma	intenance – Mot	or Grader:	NA				
	-Wa	ter Truck:	NA				
Cast Breekdown.	Truck/Log	adar Taam		Support	Equipment	Maintenan	ce Equipment
Cost Dreakdown.	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	NΔ	50	ΝΔ	ΝΔ
Ownership cost/hour:	\$26.39	\$57	7 78	NA	\$241.38	NA	NA
Operating cost/hour:	\$64.76	\$5	5.23	NA	\$71.96	NA	NA
%Utilization-riper:	NA	φυ	0	NA	۵, ۱۳.۶۵ NA	NA	NA
Ripper own. cost/hour:	NA	\$0	0.00	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$(0.00	NA	\$0.00	NA	NA
Operator cost/hour:	\$24.82	\$35	5.97	NA	\$40.04	NA	NA
Unit Subtotals:	\$115.97	\$149	9.98	NA	\$353.38	NA	NA
Number of Units:	3		1	0	1	0	0
Group Subtotals:	Work:	\$497.89		Support:	\$353.38	Maint:	\$0.00
Total work team cost	/hour: <u>\$851.27</u>						
MATERIAL QUA	NTITIES						
Initial volume:	54,853		CCY	Swell	factor: 1.125		
Loose volume:	61,71	0	LCY				
Sou	rce of estimated	volume:	68 ac	c @ 6"			
Source of	of estimated swe	ell factor:	Cat H	Iandbook			
	Material Purch	ase Cost:	\$0.00)			
	10	otal Cost:	\$0.00)			
HOURLY PRO	DUCTION						
Truck Capacity:							
Truck Payload (weig	ht) Basis:						
Material we	eight: <u>2,550</u>			Pounds/LCY			
Descrij Datad Day	otion: Earth -	Dry packed		Pounds			
Pavload Can	acity: 19.73			LCY			
,	·						

	12.00	LCY				
Heaped Volume:	18.00	LCY				
Average Volume:	15.00	LCY				
Adjusted Volume:	18.00	LCY				
Final	Truck Volum	e Based on Number of	of Loader Passes:	12.32	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class: N	A	
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/di	irt mixtures (100	-120%) 1.100		-
Adjusted Capacity:	6.160	LCY		,		-
Job Condition Corrections:		S	Site Altitude (ft.): 5	5150 feet		
	- Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
			, , , , , , , , , , , , , , , , , , ,	<u></u> _		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Numb	er of Loading Tool Pa	asses Required to	Fill Truck:	2 p	asses
Excavators and Front Shove	ls:					
Machina Cycla Tima y	Lob Conditi	on Pating: NA				
Machine Cycle Time v Selected Value v	s. Job Conditi within this Bas	on Rating: <u>NA</u> sic Rating: <u>NA</u>				
Machine Cycle Time v Selected Value v Track Loaders –	s. Job Condition within this Base Material Desc	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription:				
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	s. Job Conditivition within this Base Material Desc	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription:				
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA	s. Job Conditivithin this Bas Material Desc	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: Maneuver: NA		Dump: 0.100)	
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u>	s. Job Conditivithin this Bas Material Desc	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: Maneuver: <u>NA</u>	ime (lead dump t	Dump: 0.100)	
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders -	s. Job Conditivithin this Bas Material Desc Unadjusted E	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: Maneuver: <u>NA</u> Basic Loader Cycle Ti	ime (load, dump, r	Dump:0.100)	ıtes
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors	s. Job Conditivithin this Bas Material Desc Unadjusted E	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: Maneuver: <u>NA</u> Basic Loader Cycle Ti	ime (load, dump, r	Dump: 0.100 naneuver): 0 Factor (min.)) .525 minu Source (Cat HB)	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft bi	ime (load, dump, r	Dump: 0.100 naneuver): 0 Factor (min.) 0.000) .525 minu Source (Cat HB) (Cat HB)	
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors <u>Material:</u> Stockpile: Truck Ownership:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ow	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u></u> Maneuver: <u>NA</u> Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft. hi where hip of trucks and	ime (load, dump, r) gh or less 0.01	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040) .525 minu Source (Cat HB) (Cat HB)	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov	on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft. hig wnership of trucks and eration -0.04	ime (load, dump, r) gh or less 0.01 d loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040) .525 minu Source (Cat HB) (Cat HB) (Cat HB)	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft. his vnership of trucks and eration -0.04 get 0.00	ime (load, dump, r) gh or less 0.01 d loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti I'' to 6'' diameter 0.00 r dozer piled 10 ft. hi wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment:	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor or Common ov Constant op Nominal tar	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft. hig wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.455) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	Ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti V to 6" diameter 0.00 r dozer piled 10 ft. hi wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.455 0.555) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Conditivithin this Bas Material Desc – Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar	on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti I'' to 6'' diameter 0.00 r dozer piled 10 ft. hi wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.455 0.555) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	ites
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Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar : 0.50 : 0.555	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti to 6" diameter 0.00 r dozer piled 10 ft. hig wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load T Minutes Minutes	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.455 0.555 for site altitude: for site altitude:) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 0.555	Ites
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time k Maneuver and Dump Time	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar : 0.50 : 0.555 : 0.90	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u></u> Maneuver: <u>NA</u> Basic Loader Cycle Ti " to 6" diameter 0.00 r dozer piled 10 ft. hi wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load 7 Minutes Minutes Minutes Minutes	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.455 0.555 0.555 for site altitude: for site altitude: for site altitude: for site altitude:) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.500 0.555 0.900	ttes
Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time Truck Load Time k Maneuver and Dump Time	s. Job Conditivithin this Bas Material Desc Unadjusted E Material 3/4 Conveyor of Common ov Constant op Nominal tar : 0.50 : 0.555 : 0.90	on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Ti 2" to 6" diameter 0.00 r dozer piled 10 ft. hi wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load 7 Minutes Minutes Minutes	ime (load, dump, r) gh or less 0.01 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) 0.000 0.010 -0.040 0.000 -0.040 0.000 -0.070 0.455 0.555 for site altitude: for site altitude: for site altitude:) .525 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.500 0.555 0.900	Ites Minute Minute Minute

Haul Rout	te:			1				
Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time	
1	600.0	0	1.00	8.00	9.00	1249	(\min)	
1	000.0	0	1.00	0.00	9.00	1249	0.515	
Return Ro	oute:				Haul Time:	0.515	minutes	
Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	600.0	0	-1.00	8.00	7.00	2555	0.266	
				Total Tru	Return Time: ack Cycle Time:	0.266 2.736	minute	es es
Loading Too Produ Truck Unit Produ	l unit oction	700.66	LCY/Hour		Adjusted for j	ob efficiency:	581.55	LCY/Hour
Truck Olin Trodu		270.18	LCY/Hour		Adjusted for j	ob efficiency:	224.25	LCY/Hour
Optimal No. of Tr	ucks:	3	Truck(s)		Selected Num	ber of Trucks:	3	Truck(s)
			Adjuste Adjusted sing Adjusted multip	ed hourly truc le truck/loade le truck/loade	ek team production er team production er team production	on: 672 on: 581 on: 581	.74 LCY .55 LCY .55 LCY	I∕Hour I∕Hour I∕Hour
JOB TIN	ME AN	ND COST						
Fleet s	size:	1	Team(s)	,	Total job time:	106.1	1 H	ours
Unit c	cost:	\$1.464	/LCY		Total job cost:	\$90,3	30	

REVEGETATION WORK

Task description:		Revegetation Mix B - 12 ac of slope area					
Site: Cole Gravel Pit		Permit Action: <u>1-24</u> Pe		Permit/Job	ermit/Job#: <u>M2004020</u>		
PROJECT	IDENTIFIC	CATION State: Colorado		Abbreviation	None		
Date: User:	2/9/2024 ACY	County: Mesa		Filename:	M020-05a		
Age	ency or organi	zation name: DRMS					

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium sulfate, 21-0-0 with 24% S	5.00	pound	\$0.53	\$2.65
Richlawn 3-6-3 w/ mycorrihiza humates	500.00	pound	\$0.46	\$227.80
(Pounds)				
			Total Fertilizer Materials Cost/Acre	\$230.45

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$41.82
	Total Fertilizer Application Cost/Acre	\$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
Arrowleaf Balsamroot	0.25	0.31	\$17.55
Indian Ricegrass - Paloma	3.00	9.71	\$33.38
Galleta	2.00	7.30	\$44.70
Rabbitbrush, Rubber	0.12	1.79	\$7.72
Sage, Fringed	0.06	5.01	\$2.46
Sagebrush, Mountain or Big	0.12	6.34	\$2.37
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Timothy - Climax	2.00	57.39	\$3.20

Yarrow, Western	0.12	7.30	\$5.02
		102 56	
Totals Seed Mix	10.17	105.56	\$209.14

Application

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

MULCHING and MISCELLANEOUS

Materials

	Units /			
Description	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}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

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
	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:	12	Cost /Acre:	\$1,974.66	
Estimated Failure Rate:	60%	Cost /Acre*:	\$1,702.39	
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING		
Initial Job Cost: \$23,695.92				

\$23,095.9 <u>2</u>
\$12,257.21
\$35,953
20.00

REVEGETATION WORK

Task description:		Revegetation of Mi	x A - 80 acres on pit floo	or		
Site: Cole Gravel Pit		Permit Action: <u>1-24</u>		Permit/Job	#: <u>M2004020</u>	
PROJECT	IDENTIFIC	ATION State: C	olorado	Abbreviation	None	
Date: User:	2/9/2024 ACY	County: N	Iesa	Filename:	M020-05b	
Agency or organization name: DRMS						

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium sulfate, 21-0-0 with 24% S	5.00	pound	\$0.53	\$2.65
Richlawn 3-6-3 w/ mycorrihiza humates	500.00	pound	\$0.46	\$227.80
(Pounds)				
			Total Fertilizer Materials Cost/Acre	\$230.45

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$41.82
	Total Fertilizer Application Cost/Acre	\$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
Indian Ricegrass - Paloma	1.00	3.24	\$11.13
Galleta	2.00	7.30	\$44.70
Milk Vetch, Cicer - Monarch	20.00	66.57	\$164.00
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Timothy - Climax	2.00	57.39	\$3.20
Totals Seed Mix	27.50	142.92	\$315.78

Application

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

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}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

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
	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:	80	Cost /Acre:	\$2,081.30
Estimated Failure Rate:	60%	Cost /Acre*:	\$1,809.03
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$166,504.00	
Reseeding Job Cost:	\$86,833.44	
Total Job Cost:	\$253,337	
Job Hours:	130.00	

REVEGETATION WORK

Task description:		Revegetation of M	vegetation of Mix A - 8 ac previsouly reclaimed			
Site: Cole Gravel Pit		Perm	Permit Action: <u>1-24</u>		o#: <u>M2004020</u>	
PROJECT	IDENTIFIC	CATION State:	Colorado	Abbreviation	None	
Date:	2/9/2024	County:	Mesa	Filename:	M020-05c	
User:	ACY					
Agency or organization name: DRMS						

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium sulfate, 21-0-0 with 24% S	5.00	pound	\$0.53	\$2.65
Richlawn 3-6-3 w/ mycorrihiza humates	500.00	pound	\$0.46	\$227.80
(Pounds)				
			Total Fertilizer Materials Cost/Acre	\$230.45

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$41.82
	Total Fertilizer Application Cost/Acre	\$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
Indian Ricegrass - Paloma	1.00	3.24	\$11.13
Galleta	2.00	7.30	\$44.70
Milk Vetch, Cicer - Monarch	20.00	66.57	\$164.00
Saltbush, Four Wing	2.00	2.75	\$25.00
Globemallow, Scarlet (or copper)	0.50	5.66	\$67.75
Timothy - Climax	2.00	57.39	\$3.20
Totals Seed Mix	27.50	142.92	\$315.78

Application

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

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}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

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
	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:	8	Cost /Acre:	\$2,081.30
Estimated Failure Rate:	60%	Cost /Acre*:	\$1,696.21
*Selected Replanting Work Items:	SEEDING, MULCHING		

Initial Job Cost:	\$16,650.40
Reseeding Job Cost:	\$8,141.81
Total Job Cost:	\$24,792
Job Hours:	12.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Ini	tial mobilization					
: Cole Gravel P	it	Permit	Action: <u>1-24</u>		I	Permit/Job#: <u>M</u>	2004020
PROJECT IDE	NTIFICATI	<u>ION</u>					
Task #: 104	4	State: Co	olorado		Abbre	viation: None	
Date: $2/9$ User: AC	/2024 Y	County: <u>Me</u>	esa		Fi	lename: M020	-10a
Agency	or organization	n name: DRMS					
EQUIPMENT 1	RANSPOR	<u>T RIG COST</u>					
					Shift bas	sis: 1 per da	у
				C	Cost Data Sour	ce: CRG Da	ta
Truck	Tractor Desc	ription: GENE	RIC ON-HIGH	WAY TRU	CK TRACTC	R, 6X4, DIESEL	POWERED,
		-		400 HP	(2ND HALF,	2006)	
Truc	k Trailer Desc	cription: G	ENERIC FOLD	DING GOO	SENECK, DR	OP DECK EQUI	IPMENT
			r	TRAILER	(25T, 50T, AN	ID 100T)	
Cost Breakdown:							
Available Rig C	apacities	0-25 Tons	26-50 Tons	51+	Tons		
Ownership	Cost/Hour:	\$20.26	\$36.04	\$4	7.05		
Operating	Cost/Hour:	\$39.51	\$76.08	\$8	2.85		
Operator	Cost/Hour:	\$22.52	\$22.52	\$2	2.52		
Helper	Cost/Hour:	\$0.00	\$23.53	\$2	3.53		
Total Uni	Cost/Hour:	\$82.29	\$158.17	\$1'	75.95		
NON ROADAB	LE EQUIPN	MENT:					
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
Description	(TONS)		t	Sile	fleet		
Cat D8T - 8SU	53.08	\$255.49	\$175.95	3	\$1.294.32	\$527.85	\$500.00
CAT 972H	28.00	\$57.78	\$158.17	1	\$215.95	\$158.17	\$750.00
Drill/Broadcast	25.00	\$6.73	\$82.29	2	\$178.04	\$164.58	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(Bowie LD-90)	0.00		+		+	• • • •	\$230.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 12-18 cy, 6x4	\$115.97	3	\$347.91	\$347.91
Flatbed Truck, 6x4, 45K GVW	\$89.38	1	\$89.38	\$89.38
Light Duty Pickup, 4x4, 1 T.	\$128.47	2	\$256.94	\$256.94
Crew				
		Subtotals:	\$694.23	\$694.23

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$8,548.78	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$370.26	_

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.27	0.27
Return Time (Hours):	0.27	0.27
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.53	0.53

JOB TIME AND COST

Total job time: **3.07** Hours

Total job cost: \$8,919

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Sec	ondary mobilizat	ion				
: <u>Cole Gravel Pi</u>	t	Permit	Action: <u>1-24</u>			Permit/Job#: <u>N</u>	12004020
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 10B		State: Co	olorado		Abbre	eviation: None	•
Date: 2/12	2/2024	County: Me	esa		Fi	ilename: M020	0-10b
User: AC	Y						
Agency o	r organizatior	n name: DRMS					
EQUIPMENT T	RANSPOR	T RIG COST					
					Shift ba	sis: 1 per da	av
				C	ost Data Sou	rce: CRG Da	ata
Truck	Tractor Dose	rintion: CENE					
TTUCK	Tractor Desc.		KIC ON-IIIOII	400 HP	2ND HALF	2006)	L FOWERED,
Truck	Trailer Desc	ription G	ENERIC FOLD	ING GOO	SENECK DI	ROP DECK EOU	IPMENT
Truck	Trailer Dese			TRAILER (25T. 50T. Al	ND 100T)	
					,,,,		
Cost Breakdown:							
Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51+	Tons		
Ownership	Cost/Hour:	\$20.26	\$36.04	\$4	7.05		
Operating	Cost/Hour:	\$39.51	\$76.08	\$8	2.85		
Operator	Cost/Hour:	\$22.52	\$22.52	\$2	2.52		
Helper	Cost/Hour:	\$0.00	\$23.53	\$2	3.53		
Total Unit	Cost/Hour:	\$82.29	\$158.17	\$17	75.95		
NON ROADABI	LE EQUIPN	<u>MENT:</u>					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trin	Return Trip	DOT Permit
Description	I Init	Cost/br/ unit	Cost/hr/uni	Size	Cost/br/	Cost/hr/ fleet	
Description				SILC	COSUIII/		Cost/ fleet
-	(TONS)	Cost/III/ ullit	t		fleet		Cost/ fleet
Drill/Broadcast	(TONS) 25.00	\$6.73	t \$82.29	1	fleet \$89.02	\$82.29	\$250.00
Drill/Broadcast Seeder with	(TONS) 25.00	\$6.73	t \$82.29	1	fleet \$89.02	\$82.29	\$250.00
Drill/Broadcast Seeder with Tractor	(TONS) 25.00	\$6.73	t \$82.29	1	fleet \$89.02	\$82.29	\$250.00
Drill/Broadcast Seeder with Tractor Power Mulcher (Bowie LD-90)	(TONS) 25.00 6.00	\$6.73 \$25.94	t \$82.29 \$82.29	1	fleet \$89.02 \$108.23	\$82.29 \$82.29	\$250.00 \$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$89.38	1	\$89.38	\$89.38
Light Duty Pickup, 4x4, 1 T.	\$128.47	2	\$256.94	\$256.94
Crew				
		Subtotals:	\$346.32	\$346.32

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$1,587.48	_
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$184.70	

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.27	0.27
Return Time (Hours):	0.27	0.27
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.53	0.53

JOB TIME AND COST

Total job time: _____ Hours

Total job cost: ______\$1,772_____