

Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

August 26, 2019

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

RE: Orchard Grove Industrial Pit, Permit No. M-1990-094, Technical Revision (TR-2) Approval

Dear Mr. Larsen/Doody:

On August 26, 2019 the Division of Reclamation, Mining and Safety (Division) <u>approved</u> the Technical Revision request (TR-2) submitted on June 19, 2019, addressing the following:

Revise mining and reclamation plans;

- All 34 ac disturbed at once, while mining 6 ac pond max.
- No pond upon final reclamation, 16 ac of graveled area and 18 ac to be revegetated for final reclamation.
- 30,000 cy of imported inert fill on site for pond backfill.
- Apply topsoil to 3+ inches over 18 ac, on site 1500 cy, import deficit (County only has compost not topsoil- alternative is 2" @ \$20 cy)
- Planting of cottonwoods every 40 ft. along Redlands Pkwy (about 33 trees).

The terms of the TR-2 approved by the Division are hereby incorporated into Permit No. M-1990-094. All other conditions and requirements of the permit remain in full force and effect.

The estimated liability amount of \$362,519 exceeds the \$52,600 Financial Warranty currently held for this site. If you have not already done so, please submit additional bond in the amount of \$309,919. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted. The revision will not be final until the bond is approved by the Division.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us



M-1990-094 Page 2 of 2 8/26/19

Sincerely,

Amy Yeldell

Environmental Protection Specialist

Cc: Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Orchard	Grove Industria	Permit Action:	TR-2	Permit/Job	#: <u>M1990094</u>
PROJECT	IDENTIFICAT	<u> TION</u>			
Task #: Date:	ACY 8/26/2019	State: Colorado County: Mesa		Abbreviation: Filename:	None M094-ACY
User:	ACY	County. <u>Wesa</u>		rhename.	W1094-AC1

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
01a	Debris handling and structural removal	DEMOLISH	1	8.00	\$1,473
02a	Backfill Pond	TRUCK1	1	60.67	\$72,285
03a	Rip 18 ac to be reveg	RIPPER	1	27.49	\$6,734
04a	Haul imported topsoil	TRUCK1] 1	50.92	\$178,279
05a	Revegetation of 18 ac	REVEGE	1	24.00	\$34,005
05b	Cottonwood Planting	REVEGE	1	24.00	\$3,809
06a	Initial Mobilization to site	MOBILIZE	1	2.66	\$3,823
06b	Secondary Mobilization to site	MOBILIZE	1	2.66	\$1,450
		MOBILIZE 1 SUBTOTALS:		200.4	\$301,858

INDIRECT COSTS

OVERHEAD AND PROFIT:

2.02 Total = \$6,098 Liability insurance: Performance bond: 1.05 Total = \$3,170 Job superintendent: 50.00 Total = \$3,470 Profit: \$30,186 10.00 Total =

TOTAL O & P = \$42,922 CONTRACT AMOUNT (direct + O & P) = \$344,780

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Engineering work and/or contract/bid preparation: Reclamation management and/or administration: 5.00 \$17,239

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$60,661

TOTAL BOND AMOUNT (direct + indirect) = \$362,519

DEMOLITION WORK

Task description: Debris handling and structural removal

Site: Orchard Gro		Permit Action: TR-2		Pe	ermit/Job#:	M1990094
Task #: 01A Date: 8/26/2019 User: ACY		tate: Colorado unty: Mesa		Abbreviat Filena		-01a
Agency of MIT COSTS	or organization nam	ne: DRMS		Location	adjustment:	95.50 %
Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
cale House: offsite isposal	10' x 10' x 10'	Bldg. (SN) demo./off- site disposal in approved landfill - Max. 15 mile haul	1,000.00	CF	\$0.35	\$350.00
mall steel debris: fsite disposal	20	Loading and 5 mile haul, salvage allowed - Steel frame structures	20.00	CY	\$10.55	\$211.00
cale ramps, concrete, nsite disposal	20 cu.yd.	Push demolished materials/rubble/debris into pit - Max. 200 ft. push	20.00	CY	\$1.62	\$32.36
cale, demo and fsite disposal	10' x 50' x 5'	Loading and 5 mile haul, salvage allowed - Steel frame structures	90.00	CY	\$10.55	\$949.50
Job Hours:	8.00	Subtotal (unadjusted): \$1,	542.86	(adj	otal Cost usted for ocation):	\$1,473.43

TRUCK/LOADER TEAM WORK

Task description: Site: Orchard Grove	<u>Backfill</u>		Actio	on: TR-2		Permit/Job#:	M1000004	
Site. Ofcharu Grove	mustriai Fit	remm	Acu	on. <u>1 K-2</u>		remm/J00#	W11990094	
PROJECT IDEN	NTIFICATION	<u>[</u>						
Task #: 02A		State: C	Colora	ado	Ab	breviation: 1	None	
Date: 8/26/2	2019	County: N	Mesa			Filename:	M094-02a	
User: ACY								
Agency or	organization nar	ne: DRM	S					=
HOURLY EQUI	PMENT COST	Г			Shift bas	is: <u>1 per day</u>		
HOCKET EQUI	TVIETTI COD	<u>-</u>	1	Equipment Descri		is. <u>1 per day</u>		
	Fruck Loader Tea	m -Truck:		eric 15-18 cy, 6x ²				-
		-Loader:	CA	Г 972Н				-
Supp	ort Equipment -L		NA	DOT OCH				-
Road M	-Di laintenance –Mot	ump Area:	NA	D8T - 8SU				-
Touc IV		iter Truck:	NA					•
Cost Breakdown:	Truck/Loa Truck	ader Team Loader		Support I Load Area	Equipment	Mainter Motor Grade	nance Equipar	
					Dump Area	Motor Grade	r water.	
%Utilization-machine:	100		100	NA	50	N.		NA
Ownership cost/hour:	\$28.38		5.54	NA	\$103.86	N.		NA
Operating cost/hour:	\$55.36	\$55	5.81	NA	\$41.13	N.		NA
%Utilization-riper: Ripper own. cost/hour:	NA NA	\$(0.00	NA NA	NA \$0.00	NA NA		NA NA
Ripper op. cost/hour:	NA NA		0.00	NA NA	\$0.00	NA NA		NA
Operator cost/hour:	\$24.79		5.93	NA	\$39.98	NA NA		NA
Unit Subtotals:	\$108.53	\$138		NA	\$184.97	N.		NA
Number of Units:	8	ΨΙΟ	1	0	1		0	0
Group Subtotals:	Work:	\$1,006.52		Support:	\$184.97	Main	t: \$0.00	
Total work team co	st/hour \$1 101	40		11			<u> </u>	
Total work team co	st/110ti1. <u>\$1,191.</u>	1 7						
MATERIAL QU	ANTITIES							
Initial volume	: 30,000		CCY	Swell	factor: 1.165			
Loose volume			LCY					
So	ource of estimated	volume:	Impo	rted backfill mate	rial 30,000 cv ma	X		
	of estimated swe	ell factor:	Cat I	Handbook	, .			_
	Material Purch		\$0.00					-
	Т	otal Cost: _	\$0.00)				
HOURLY PRO	DUCTION							
T. I.G. "	20011011							

<u>Truck Capacity:</u> <u>Truck Payload (weight) Basis:</u>

Material weight:	2,900	Pounds/LCY	
Description:	Decomposed 1	rock - 50% Rock, 50% Earth	
Rated Payload:	63,980	Pounds	
Payload Capacity:	22.06	LCY	

Truck Bed (volume) Basis Struck Volume:	<u>s.</u> 15.00	LCY					
Heaped Volume:	18.00	— LCY					
Average Volume:	16.50	— LCY					
Adjusted Volume:	18.00	— LCY					
ragusted volume.	10.00						
Fi	nal Truck Vol	ume Based or	n Number of	Loader Passes:	12.32	LCY	
Loading Tool Capacity							
				Buck	ket Size Class:l	NA	
Rated Capacity			Y (heaped)				_
Bucket Fill Factor	-		er - rock/dirt	t mixtures (100	-120%) 1.100		_
Adjusted Capacity	6.16	0 LCY	Y				
Job Condition Correction	ons:		Sit	te Altitude (ft.): 4	1530 feet		
	Truck	L	oader	Source			
Altitude Adj:	1.000	1	1.000	(CAT HB	5)		
Job Efficiency:	0.830	(0.830	(CAT HB	5)		
Net Correction:	0.830		0.830				
T 1' T 1G 1 T							
Loading Lool Cycle Lin				D 1 1 1	C'11 CC 1	2	
Loading Tool Cycle Tin		mber of Load	ing Tool Pas	sses Required to	Fill Truck:	2	passes
Excavators and Front Sho		mber of Load	ing Tool Pas	sses Required to	Fill Truck:	2	passes
Excavators and Front Sho Machine Cycle Tim	ovels: e vs. Job Con		NA	sses Required to	Fill Truck:	2	passes
Excavators and Front Sho Machine Cycle Tim Selected Val	ovels: ne vs. Job Con ne within this	dition Rating: Basic Rating:	NA	sses Required to	Fill Truck:	2	passes
Excavators and Front Sho Machine Cycle Tim	ovels: e vs. Job Con ue within this s – Material D	dition Rating: Basic Rating:	NA	sses Required to	Fill Truck:	2	passes
Excavators and Front Sho Machine Cycle Tim Selected Val Track Loader	ovels: e vs. Job Con ue within this s – Material D	dition Rating: Basic Rating:	NA NA	sses Required to	Fill Truck:		passes
Excavators and Front Sho Machine Cycle Time Selected Val Track Loader Cycle Time Elements (mit Load: NA	ovels: e vs. Job Con ue within this s – Material C n.):	dition Rating: Basic Rating: Description: Maneuver:	NA NA		Dump: 0.10	00	passes
Excavators and Front Sho Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade	ovels: e vs. Job Con ue within this s – Material E n.): rs - Unadjuste	dition Rating: Basic Rating: Description: Maneuver:	NA NA		Dump: 0.10	00 0.525 mir	
Excavators and Front Sho Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto	ovels: e vs. Job Con ue within this s – Material E n.): rs - Unadjuste	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade	NA NA		Dump: 0.10 naneuver):	00 0.525 mir Source	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia	ovels: e vs. Job Con ue within this s – Material E n.): rs - Unadjuste rs	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade	NA NA NA er Cycle Tin	ne (load, dump, r	Dump: 0.10 naneuver): Factor (min.) 0.020	00 0.525 mir Source (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjust	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade naterial 0.02	NA NA NA er Cycle Tin	ne (load, dump, r	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000	0.525 mir Source (Cat HB) (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia	ovels: ne vs. Job Con ue within this s – Material E n.): rs - Unadjuste rs l: Mixed m e: No adjus o: Common	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade	NA NA NA er Cycle Tin	ne (load, dump, r	Dump: 0.10 naneuver): Factor (min.) 0.020	00 0.525 mir Source (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: Common: Constant	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade naterial 0.02 stment - factor n ownership or	NA NA NA er Cycle Tin	ne (load, dump, r	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040	0.525 mir Source (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: Common: Constant	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade material 0.02 etment - factor n ownership of t operation -0. target 0.00	NA NA NA er Cycle Tin not applical f trucks and	ne (load, dump, r	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.525 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: Common: Constant	dition Rating: Basic Rating: Description: Maneuver: ed Basic Load naterial 0.02 stment - factor n ownership or coperation -0. target 0.00	NA NA NA er Cycle Tin r not applicate f trucks and 04 et Cycle Tim	ne (load, dump, r	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.525 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: Common: Constant	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade naterial 0.02 stment - factor n ownership or operation -0. target 0.00 Ne	NA NA NA er Cycle Time on the application of trucks and	ne (load, dump, r ble 0.00 loaders -0.04	Dump: 0.10 naneuver):	0.525 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: Common: Constant	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade naterial 0.02 stment - factor n ownership or operation -0. target 0.00 Ne	NA NA NA er Cycle Time on the application of trucks and	ble 0.00 loaders -0.04	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio Dump Targe	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster Constant t: Nominal	dition Rating: Basic Rating: Description: Maneuver: ed Basic Loade naterial 0.02 stment - factor n ownership or operation -0. target 0.00 Ne Ad	NA NA NA Provide Time Trucks and 04 Provide Type Trucks and 04 Provide Type Trucks and 04 Provide Type Type Type Type Type Type Type Typ	ble 0.00 loaders -0.04 le Adjustment: er Cycle Time: ime per Truck:	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front She Machine Cycle Time Selected Val Track Loader Cycle Time Elements (mine) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershit Operation Dump Targer	e vs. Job Conue within this s – Material En.): rs - Unadjusters l: Mixed me: No adjuster: No adjuster: No minal	dition Rating: Basic Rating: Description: Maneuver: ed Basic Load naterial 0.02 stment - factor n ownership or toperation -0. target 0.00 Ne Ad Minu	NA NA NA Proof applicate for trucks and 04 et Cycle Timing justed Loade Net Load Times tes	ble 0.00 loaders -0.04 loe Adjustment: er Cycle Time: ime per Truck: _	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.465 0.565	O.525 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes

<u>Truck Travel (Haul & Return) Time:</u> Road Condition: <u>Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0</u>

Haul Route:

Hauf Rou	ic.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	8.00	8.00	1131	0.558

Haul Time: 0.558 minutes

Return Route:

ixctui ii ixc	rute.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	8.00	8.00	1931	0.326

Return Time: 0.326 minutes
Total Truck Cycle Time: 2.849 minutes

Loading Tool unit

Production Production Truck Unit Production

Truck Unit Production

259.46 LCY/Hour Adjusted for job efficiency: 576.09 LCY/Hour Adjusted for job efficiency: 215.35 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 8 Truck(s)

Adjusted hourly truck team production: 1,722.81 LCY/Hour Adjusted single truck/loader team production: 576.09 LCY/Hour Adjusted multiple truck/loader team production: 576.09 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 60.67
 Hours

 Unit cost:
 \$2.068
 /LCY
 Total job cost:
 \$72,285

BULLDOZER RIPPING WORK

	Task description:	Rip 1	8 ac to be reveg				
Site	: Orchard Gro	ve Industrial Pit	Permit Action:	Tr-2	Permi	t/Job#: N	11990094
	PROJECT ID	ENTIFICATIO	<u>ON</u>				
	Task #: 03.	A	State: Colorado		Abbrevia	ation: No	one
	Date: 8/2	26/2019	County: Mesa		Filer	name: M	094-03a
	User: AC	CY					
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT CO	<u>OST</u>				
	Basic	Machine: Cat	D8T - 8SU		Horsepower:	310	
	Ripper Att	tachment: 3-Sl	nank Ripper	<u> </u>	Shift Basis:	1 per d	ay
				_	Data Source:	(CRG	•)
	Cost Breakdown	:					
		-			Utilization %		
		Ownership Co		\$103.86	NA		
		Operating Co		\$82.26	100		
		er Ownership Co		\$10.43	NA		
	Ripj	per Operating Co		\$8.38	100		
		Operator Co Total Unit Co		\$39.98 \$244.91	NA		
				\$244.91			
		Total Fleet Co	st/Hour: \$244	l.91			
	MATERIAL (<u>DUANTITIES</u>	Sele	cted estimating	method: Area		
	Alternate Method	ds:					
smic:	NA		Bank Volume:	NA	BCY	NA	
Area:	18.00	acres	Rip Depth (ft):	2.00	Volume: 58,0	80	BCY or
		Source of estin	nated quantity: Reclam	ation plan			
	HOURLY PRO	ODUCTION					
		020011					
	Seismic:	S	Seismic Velocity:	NA	feet/second		
			eisine velocity.	IIA			
	Area:						
			e Ripping Depth:	2.56	feet/pass		
			e Ripping Width: Ripping Length:	7.08 250.00	feet/pass feet/pass		
			ige Dozer Speed:	88.00	feet/minute		
			Maneuver Time:	0.25	minutes/pas	S	
			ion per unit area:	0.789	acres/hour		
	Job Condition Co	orrection Factors					
	Un	nadjusted Hourly	Unit Production:	0.789	Acres/hr		
		•	Site Altitude:	4,530	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day))	
			Net Correction:	0.83	multiplier		
		Adjusted	Hourly Unit Production:	0.65	Acres/hr		
			Hourly Fleet Production:	0.65	Acres/hr		
	JOB TIME AN	v	-				
	Fleet size:	1	Grader(s)	Total job tim	ne: 27.4 9	9	Hours
	_	¢274.002		•			
	Unit cost:	\$374.092	Per acre	Total job cos	st: \$6,73	4	

TRUCK/LOADER TEAM WORK

%Utilization-machine: 100 100 NA 50 NA NA Ownership cost/hour: \$28.38 \$46.54 NA \$103.86 NA NA Operating cost/hour: \$55.36 \$55.81 NA \$41.13 NA NA %Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 NA \$0.00 NA NA Ripper op. cost/hour: NA \$0.00 NA \$0.00 NA NA Operator cost/hour: \$24.79 \$35.93 NA \$39.98 NA NA Unit Subtotals: \$108.53 \$138.28 NA \$184.97 NA NA	Task description:	Haul im	ported topsoil				
Task #: 04A Date: 8/26/2019 County: Mesa Filename: M094-04a	Site: Orchard Grove	Industrial Pit	Permit Action	on: TR-2		Permit/Job#: N	И1990094
Task #: 04A Date: 8/26/2019 County: Mesa Filename: M094-04a	PROJECT IDE	NTIFICATION	I				
HOURLY EQUIPMENT COST	Task #: 04A Date: 8/26/	/2019	State: Colora	ado	Ab		
Equipment Description Generic 15-18 cy, 6x4 CAT 972H	Agency o	r organization nar	ne: DRMS				
Truck Loader Team - Truck: Generic 15-18 cy, 6x4 CAT 972H	HOURLY EQU	IPMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>	
CAT 972H	-	Truck Londor Too					
Cost Breakdown:			-Loader: CA		+		
Road Maintenance - Motor Grader: -Water Truck: NA	Sup			DOT OCII			
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment	Road N			D61 - 65U			
Truck		-Wa	nter Truck: NA				
Ownership cost/hour: \$28.38	Cost Breakdown:						
Operating cost/hour: \$55.36 \$55.81 NA \$41.13 NA NA \$40.00 NA NA NA NA NA NA NA	%Utilization-machine:	100	100	NA	50	NA	. NA
Wutilization-riper:	Ownership cost/hour:		\$46.54	NA	\$103.86	NA	. NA
Ripper own. cost/hour: NA \$0.00 NA \$0.00 NA NA NA Ripper op. cost/hour: NA \$0.00 NA \$0.00 NA NA NA NA NA NA NA	Operating cost/hour:	\$55.36	\$55.81	NA	\$41.13	NA	. NA
Ripper op. cost/hour: NA \$0.00 NA \$0.00 NA NA							
Operator cost/hour: \$24.79	**		· ·				
Unit Subtotals: \$108.53							
Number of Units:	*	·					
Group Subtotals: Work: \$1,006.52 Support: \$184.97 Maint: \$0.00 Total work team cost/hour: \$1,191.49 MATERIAL QUANTITIES Initial volume: 4,840 CCY Swell factor: 1.215 Loose volume: 5,881 LCY Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: \$20.00 Total Cost: \$20.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil Rated Payload: 63,980 Pounds							
Total work team cost/hour: \$1.191.49 MATERIAL QUANTITIES Initial volume: 4,840							
Initial volume: 4,840	Total work team co	ost/hour: \$1,191.	·	Биррогс	ψ101. <i>)</i> /	Trium.	
Loose volume: Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Truck Capacity: Truck Payload (weight) Basis: Material weight: Description: Rated Payload: 63,980 Pounds LCY 2" Compost over 16 ac to make 3+ inch of topsoil Cat Handbook \$20.00 \$117,612.00 Pounds/LCY Pounds/LCY Pounds Pounds	MATERIAL QU	<u>JANTITIES</u>					
Source of estimated swell factor: Material Purchase Cost: Total Cost: S20.00 #IOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: Description: Rated Payload: 63,980 Pounds Cat Handbook \$20.00 \$117,612.00					factor: 1.215		
Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil Rated Payload: 63,980 Pounds		e of estimated swe Material Purch	ell factor: Cat H ase Cost: \$20.0	Handbook 00	to make 3+ inch	of topsoil	
Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil Rated Payload: 63,980 Pounds	HOURLY PRO	<u>ODUCTION</u>					
Description: Top Soil Rated Payload: 63,980 Pounds	Truck Payload (we			Pounds/LCY			
	Rated P	Payload: 63,980					

Truck Bed (volume) Bas Struck Volume:		15.00	LCY								
Heaped Volume:		18.00	LCY								
Average Volume:		16.50	LCY								
Adjusted Volume:		18.00	LCY								
F	inal Tr	uck Volum	e Based on	Number of	Loader Pas	sses:	1	2.32	LC	Y	
Loading Tool Capacity						-					
			1			Buck	et Size Cl	ass:	NA		
Rated Capacity		5.600		(heaped)		/4.0.0					_
Bucket Fill Factor		1.100			t mixtures	(100-	120%) 1.	100			_
Adjusted Capacity	/:	6.160	LCY								
Job Condition Correcti	ons:			Sit	te Altitude ((ft.): <u>4:</u>	530 feet				
		Fruck		ader		urce					
Altitude Adj:		1.000		000		T HB)					
Job Efficiency:	(0.830	0.	830	(CA	T HB)					
Net Correction:	C	0.830	0.	830							
Loading Tool Cycle Ti	me:	Numbe	er of Loadir	ng Tool Pas	sses Reauire	ed to F	ill Truck:		2	1	passes
Loading Tool Cycle Tin		Numb	er of Loadir	ng Tool Pas	sses Require	ed to F	ill Truck:		2	1	passes
Excavators and Front Sh	ovels:				sses Require	ed to F	ill Truck:		2	1	passes
Excavators and Front Sh Machine Cycle Tir	ovels: ne vs. J	ob Conditi	on Rating:	NA	sses Require	ed to F	ill Truck		2	1	passes
Excavators and Front Sh Machine Cycle Tir Selected Va	ovels: ne vs. J lue with	ob Condition	on Rating: sic Rating:		-				2	1	passes
Excavators and Front Sh Machine Cycle Tir	ne vs. J lue with	ob Condition	on Rating: sic Rating:	NA	sses Require				2	1	passes
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade	ne vs. J lue with	ob Condition this Bastaterial Description	on Rating: sic Rating:	NA	-					1	passes
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade Cycle Time Elements (m Load: NA	ne vs. J lue with rs – Ma in.):	ob Condition this Basaterial Desc	on Rating: sic Rating: cription:	NA NA			Dump	0.10			
Excavators and Front Sh Machine Cycle Tir Selected Va Track Loade Cycle Time Elements (m	ne vs. J lue with rs – Ma in.):	ob Condition this Basaterial Desc	on Rating: sic Rating: cription:	NA NA			Dump	0.10	00		
Excavators and Front Shadenine Cycle Tire Selected Va Track Loade Cycle Time Elements (material Load: NA Wheel and Track Loads	ne vs. J lue with rs – Ma in.): ers - Ur	ob Condition this Basaterial Desc	on Rating: sic Rating: cription: Maneuver: Basic Loader	NA NA			Dump aneuver)	0.10 (min.)	00 0.525 So (Ca	min urce t HB)	
Excavators and Front Shadenine Cycle Tire Selected Va Track Loade Cycle Time Elements (magenta Load: NA Wheel and Track Loade Cycle Time Factor	ne vs. J lue with rs – Ma in.): ers - Ur	Tob Condition this Base aterial Description 1 and a madjusted Education 1 and a madjusted Education 1 and a madjusted Education 1 and a material Education 1	on Rating: sic Rating: cription: Maneuver: Basic Loader	NA NA NA Cycle Tin	ne (load, du		Dump aneuver) Factor	0.10 (min.) 20	00 0.525 So (Ca	min	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magenta Load: NA Wheel and Track Load: NA Wheel and Track Load: Materia Stockpii Truck Ownersh	ne vs. J lue with rs – Ma in.): ers - Ur ors al: N le: N	Tob Condition this Base atternal Description adjusted Education and the common of the control of	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor i	NA NA NA T Cycle Tine not applical trucks and	ne (load, du	mp, m	Dump aneuver) Factor 0.0 0.0 -0.0	(min.) 20 00 40	00 0.525 So (Ca (Ca (Ca	min ource t HB) t HB) t HB)	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Naterian Stockpi Truck Ownersh Operation	ne vs. J lue with rs – Ma in.): ers - Un ors al: h le: N ip: Con: C	Tob Condition this Base atternal Description In adjusted Education and Internal Inte	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor 1 vnership of eration -0.0	NA NA NA T Cycle Tine not applical trucks and	ne (load, du	mp, m	Dump aneuver) Factor 0.0 0.0 -0.0	(min.) 20 00 40 40	00 0.525 So (Ca (Ca (Ca (Ca	minource t HB) t HB) t HB)	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magenta Load: NA Wheel and Track Load: NA Wheel and Track Load: Materia Stockpii Truck Ownersh	ne vs. J lue with rs – Ma in.): ers - Un ors al: h le: N ip: Con: C	Tob Condition this Base atternal Description adjusted Education and the common of the control of	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor revership of eration -0.00 get 0.00	NA NA NA NA Cycle Tin not applical trucks and	ne (load, du ble 0.00 loaders -0.0	mp, m	Dump aneuver) Factor 0.0 0.0 -0.0 -0.0	(min.) 20 00 440 440 00	0.525 So (Ca	minource t HB) t HB) t HB) t HB) t HB)	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Naterian Stockpi Truck Ownersh Operation	ne vs. J lue with rs – Ma in.): ers - Un ors al: h le: N ip: Con: C	Tob Condition this Base atternal Description In adjusted Education and Internal Inte	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor revnership of eration -0.00 get 0.00 Net	NA NA NA T Cycle Timenot applicate trucks and 4 Cycle Timenot applicate trucks and 4	ne (load, du ble 0.00 loaders -0.0	mp, m	Dump Factor 0.0 0.0 -0.0 -0.0 -0.0 -0.0	(min.) 20 00 40 40 00 60	0.525 So (Ca (Ca (Ca (Ca (Ca min	min- urce t HB) t HB) t HB) t HB) nutes	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Naterian Stockpi Truck Ownersh Operation	ne vs. J lue with rs – Ma in.): ers - Un ors al: h le: N ip: Con: C	Tob Condition this Base atternal Description In adjusted Education and Internal Inte	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor i vnership of eration -0.0 get 0.00 Net Adju	NA NA NA NA T Cycle Timenot applical trucks and 4 Cycle Timensted Loade	ne (load, du ble 0.00 loaders -0.0	mp, m	Dump aneuver) Factor 0.0 0.0 -0.0 -0.0	(min.) 20 00 40 40 00 660 65	0.525 So (Ca (Ca (Ca (Ca (Ca min	minource t HB) t HB) t HB) t HB) t HB)	
Excavators and Front Shanne Cycle Tire Selected Va Track Loade Cycle Time Elements (magentum Load: NA Naterian Stockpi Truck Ownersh Operation	ne vs. J lue with rs – Ma in.): ers - Un ors al: h le: N ip: Con: C	Tob Condition this Base atternal Description In adjusted Education and Internal Inte	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor i vnership of eration -0.0 get 0.00 Net Adju	NA NA NA NA T Cycle Timenot applical trucks and 4 Cycle Timensted Loade	ne (load, du ble 0.00 loaders -0.0	mp, m	Dump Factor 0.0 0.0 -0.0 -0.0 0.0 0.0 0.0	(min.) 20 00 40 40 00 660 65	0.525 So (Ca (Ca (Ca (Ca (Ca min	min urce t HB) t HB) t HB) t HB) t HB) nutes nutes	
Excavators and Front Share Machine Cycle Tire Selected Va Track Loade Cycle Time Elements (machine Load: NA NA Wheel and Track Load: Na Materia Stockpi Truck Ownersh Operation Dump Targ	ne vs. J lue with rs – Ma in.): ers - Ur ors al: N le: N ip: C on: C et: N	Tob Condition this Base atternal Description In adjusted Education and Internal Inte	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor i vnership of eration -0.0 get 0.00 Net Adju	NA NA NA NA T Cycle Time trucks and 4	ble 0.00 loaders -0.0 ne Adjustmeer Cycle Tir	mp, m	Dump Factor 0.0 0.0 -0.0 -0.0 0.0 0.0 0.0	(min.) 20 00 40 40 00 65 65	0.525 So (Ca (Ca (Ca (Ca (Ca min	min urce t HB) t HB) t HB) t HB) t HB) nutes nutes	
Excavators and Front Shank Machine Cycle Tire Selected Va Track Loade Cycle Time Elements (machine Load: NA Na Naterian Stockpi Truck Ownersh Operation Dump Targ	ne vs. J lue with rs – Ma in.): ers - Ur ors le: N le: N cip: C on: C et: N	nadjusted Basel Mixed mater No adjustme Common ov Constant op Nominal tar	on Rating: sic Rating: cription: Maneuver: Basic Loader rial 0.02 ent - factor i vnership of eration -0.0 get 0.00 Net Adju	NA NA NA NA NA T Cycle Time trucks and 4 Cycle Time sted Loade Net Load Times	ne (load, du ble 0.00 loaders -0.0 ne Adjustme er Cycle Tiru Adj	mp, m O4 ent: _ ne: _ ck: _ usted f	Dump Factor 0.0 0.0 -0.0 -0.0 0.0 -0.0 0.4 0.5	0.10 (min.) 20 00 440 440 665 65 itude:	0.525 So (Ca (Ca (Ca (Ca (Ca min	minurce t HB) t HB) t HB) t HB) nutes nutes	utes

<u>Truck Travel (Haul & Return) Time:</u> Road Condition: <u>Very hard, smooth, asphalt or concrete, no tire penetration 1.2</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	59664.00	0.00	1.20	1.20	2952	20.363

Haul Time: 20.363 minutes

Return Route:

Tectarii Ite	Juic.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	59664.00	0.00	1.20	1.20	2963	20.170

Return Time: 20.170 minutes
Total Truck Cycle Time: 42.498 minutes

Loading Tool unit

Production Truck Unit Production

17.39 LCY/Hour Adjusted for job efficiency: 576.09 LCY/Hour Adjusted for job efficiency: 14.44 LCY/Hour Optimal No. of Trucks: 40 Truck(s) Selected Number of Trucks: 8 Truck(s)

Adjusted hourly truck team production: 115.49 LCY/Hour Adjusted single truck/loader team production: 115.49 LCY/Hour Adjusted multiple truck/loader team production: 115.49 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 50.92
 Hours

 Unit cost:
 \$10.316
 /LCY
 Total job cost:
 \$178,279

REVEGETATION WORK

Orchard Grove Industrial Pit	Permit Action: TR-2			Permit/Job#	: M1990094
ROJECT IDENTIFICATION					
			A 1 1	• .•	N.T.
Task #: 05A Sta Date: 8/26/2019 Count					None
Date: 8/26/2019 Count User: ACY	ty: Mesa		_	Filename:	M094-05a
Agency or organization name:	DRMS				
ERTILIZING					
aterials					ı
Description	Units / Acre	Unit	Cost	t / Unit	Cost /Acre
			\$		\$
			Tota	al Fertilizer Materials Cost/Acre	\$0.00
pplication Description					Cost /Acre
pplication Description					Cost /Acre
-	Total 1	Fertilizer A	application	n Cost/Acre	
Description	Total 1	Fertilizer A	application	n Cost/Acre	\$
Description LLING	Total	Fertilizer A	application	n Cost/Acre	\$
Description LLING Description Disc harrowing, 6" deep (MEANS 32 9	91 13.23 6100)	Fertilizer A	pplicati on	n Cost/Acre	\$ \$0.00
Description LLING Description	91 13.23 6100)	Fertilizer A	application	n Cost/Acre	\$ \$0.00 Cost /Acre
Description LLING Description Disc harrowing, 6" deep (MEANS 32 9	91 13.23 6100)			n Cost/Acre	\$0.00 Cost /Acre \$101.93 \$195.58
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 1) Subsoil scarification, (MEANS 32 91 1)	91 13.23 6100)				\$ \$0.00 Cost /Acre \$101.93
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 1) Subsoil scarification, (MEANS 32 91 1)	91 13.23 6100)	To	otal Tillin		\$0.00 Cost /Acre \$101.93 \$195.58
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 1) Subsoil scarification, (MEANS 32 91 1)	91 13.23 6100)	To		g Cost/Acre Seeds per SQ.	\$0.00 Cost /Acre \$101.93 \$195.58
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 1) Subsoil scarification, (MEANS 32 91 1) EEDING Seed Mix	91 13.23 6100)	To	Rate – PLS LBS / Acre	g Cost/Acre Seeds per SQ. FT	\$0.00 Cost /Acre \$101.93 \$195.58 \$297.51 Cost /Acre
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 12 12 12 12 12 12 12 12 12 12 12 12 12	91 13.23 6100)	To	Rate – PLS LBS / Acre 0.60	Seeds per SQ. FT	\$0.00 Cost /Acre \$101.93 \$195.58 \$297.51 Cost /Acre
Description LLING Description Disc harrowing, 6" deep (MEANS 32 91 12 12 12 12 12 12 12 12 12 12 12 12 12	91 13.23 6100)	To	Rate – PLS LBS / Acre	g Cost/Acre Seeds per SQ. FT	\$0.00 Cost /Acre \$101.93 \$195.58 \$297.51 Cost /Acre

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
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.74	\$2.74
Total Mulch Materials Cost/Acre				\$592.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$95.83
Weed spray, truck, non-aquatic area, nox. [DMG]		\$71.50
	Total Mulch Application Cost/Acre	\$237.50

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

JOB TIME AND COST

 No. of Acres:
 18
 Cost / Acre:
 \$1,434.42

 Estimated Failure Rate:
 40%
 Cost / Acre*:
 \$1,136.91

*Selected Replanting Work Items: SEEDING, MULCHING

Initial Job Cost: \$25,819.56

Reseeding Job Cost: \$8,185.75

Total Job Cost: Job Hours: 24.00

REVEGETATION WORK

O I CIIII U	l Grove Industrial I	Pit Permit	Action: TR-2			Permit/Iob#	t: M1990094
						1 Clinic 3001	. <u>141177007</u> 4
ROJECT	DENTIFICATI	<u>ON</u>					
Task #:	05B	State: Co	lorado		٨h	breviation:	None
Date:	8/26/2019	County: Me				Filename:	M094-05b
User:	ACY	Countyivic	.sa			i ilciiailic.	141074-030
Ag	gency or organization	name: DRMS					
ERTILIZ	<u>'ING</u>						
aterials							
D	•		Units /	TT 24	Cox	st / Unit	Cost /Acre
Descript	ion		Acre	Unit	Cos	st / Unit	Cost/Acre
					\$		\$
					То	tal Eautilinan	
					10	tal Fertilizer Materials	
						Cost/Acre	\$0.00
						COSUACIE	φυ.υυ
							\$
			Total	Eastiliaas	Annliaatia	~	
			10141			m ('oct/Aoro	40.00
				Fertilizer	Аррисанс	on Cost/Acre	\$0.00
LLING				rerunzer	Аррпсацо	on Cost/Acre	\$0.00
	ion			rerunzer	Аррпсацо	on Cost/Acre	
Descript		ANS 32 01 13 23		Ferunzer	Аррисацо	on Cost/Acre	Cost /Acre
Descript Disc harr	rowing, 6" deep (ME			rerunzer	Аррисацо	on Cost/Acre	Cost /Acre \$101.93
Descript Disc harr				rerunzer	Аррисацо	on Cost/Acre	Cost /Acre
Descript Disc harr	rowing, 6" deep (ME					ng Cost/Acre	Cost /Acre \$101.93
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth						Cost /Acre \$101.93 \$213.22
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth				Total Tillir		Cost /Acre \$101.93 \$213.22
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth				Total Tillin	ng Cost/Acre	Cost /Acre \$101.93 \$213.22
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth				Fotal Tillin Rate – PLS	ng Cost/Acre Seeds per SQ.	Cost /Acre \$101.93 \$213.22 \$315.15
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth				Rate – PLS LBS /	ng Cost/Acre	Cost /Acre \$101.93 \$213.22 \$315.15
Descript Disc harr Subsoilin	rowing, 6" deep (ME ng, heavy, 18" depth				Fotal Tillin Rate – PLS	ng Cost/Acre Seeds per SQ.	Cost /Acre \$101.93 \$213.22 \$315.15
Descript Disc harr Subsoilin EEDING Seed Mix Alkali Sa	rowing, 6" deep (ME ng, heavy, 18" depth				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre \$101.93 \$213.22 \$315.15
Descript Disc harr Subsoilin EEDING Seed Mis Alkali Sa Ryegrass	rowing, 6" deep (ME ng, heavy, 18" depth x acaton s, Annual/Gulf	{DMG}			Rate – PLS LBS / Acre 0.60	Seeds per SQ. FT	Cost /Acre \$101.93 \$213.22 \$315.15 Cost /Acre
Disc harr Subsoiling EEDING Seed Mix Alkali Sa Ryegrass Yellow S	rowing, 6" deep (ME ng, heavy, 18" depth	{DMG}			Rate – PLS LBS / Acre 0.60 10.00	Seeds per SQ. FT 23.42 43.62	Cost /Acre \$101.93 \$213.22 \$315.15 Cost /Acre \$17.09 \$16.50
Descript Disc harr Subsoilin EEDING Seed Mit Alkali Sa Ryegrass Yellow S	rowing, 6" deep (ME ng, heavy, 18" depth x acaton s, Annual/Gulf Gweet Clover - Madri	{DMG}			Rate – PLS LBS / Acre 0.60 10.00 1.40	Seeds per SQ. FT 23.42 43.62 8.36	Cost /Acre \$101.93 \$213.22 \$315.15 Cost /Acre \$17.09 \$16.50 \$3.96

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
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$295.00	\$590.00
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.74	\$2.74
Total Mulch Materials Cost/Acre				\$592.74

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$95.83
Weed spray, truck, non-aquatic area, nox. [DMG]		\$71.50
	Total Mulch Application Cost/Acre	\$237.50

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Cottonwood, Plains	33	Container, 5 gallon (MEANS)	\$51.02	\$2.40	\$1,683.66
		Totals	Nursery Stoc	ek Cost / Acre	\$1,683.66

JOB TIME AND COST

No. of Acres:	1	Cost /Acre:	\$3,135.72
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,683.66
*Selected Replanting Work Items:	NURSERY		

Initial Job Cost:

Reseeding Job Cost:

Total Job Cost:

Job Hours:

\$3,135.72

\$673.46

\$3,809

24.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

7	Γask description:	Initial Mobi	lization to site				
Site:	Orchard Grove Indust	rial Pit	Permit Action:	TR-2	Permit/Job#:	M1990094	
<u>P</u>]	ROJECT IDENTIFIC	<u>ATION</u>					

Task #: 06A

State: Colorado Abbreviation: None Date: 8/26/2019 County: Mesa Filename: M094-06a

User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Cat D8T - 8SU	53.08	\$114.29	\$141.54	1	\$255.83	\$141.54	\$250.00
CAT 972H	28.00	\$46.54	\$123.81	1	\$170.35	\$123.81	\$250.00
Drill/Broadcast	25.00	\$18.15	\$67.39	1	\$85.54	\$67.39	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$9.74	\$67.39	1	\$77.13	\$67.39	\$250.00
(Bowie LD-90)							

Subtotals: \$588.85 \$400.13 \$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 15-18 cy, 6x4	\$108.53	8	\$868.24	\$868.24
Light Duty Pickup, 4x4, 1 T.	\$77.33	1	\$77.33	\$77.33
Crew				

Subtotals: \$945.57 \$945.57

EQUIPMENT HAUL DISTANCE and Time

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

CO Total one-way travel distance: 5.00 miles Average Travel Speed: 30.00 mph

\$3,507.36

Total Non-Roadable Mob/Demob Cost *

** two round trips with haul rig:

Total Roadable Mob/Demob Cost **

\$315.19 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.33	0.33

JOB TIME AND COST

Total job time: 2.67 Hours

Total job cost: \$3,823

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: S	econdary Mobiliz	ation to site		
Site: Orchard Grove Industria	l Pit Permi	t Action: TR-2	Permit/Jo	b#: <u>M1990094</u>
PROJECT IDENTIFICAT	<u> TION</u>			
Task #: 06B	State: C	Colorado	Abbreviation:	None
Date: 8/26/2019	County: N	Mesa	Filename:	M094-06b
User: ACY	_			
Agency or organizati	on name: DRM	S		
2 , 2				
EQUIPMENT TRANSPO	RT RIG COST			
			Shift basis:	1 man day
				1 per day CRG Data
			Cost Data Source.	CKO Data
Truck Tractor De	scription: GEN	ERIC ON-HIGHW	AY TRUCK TRACTOR, 6X4,	DIESEL POWERED,
			400 HP (2ND HALF, 2006)	
Truck Trailer De	scription:		NG GOOSENECK, DROP DEC	~
		TR	AILER (25T, 50T, AND 100T)
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69	
Operating Cost/Hour:		\$47.02	\$55.69	
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63	
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53	

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

\$67.39

Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Drill/Broadcast	(TONS) 25.00	\$18.15	\$67.39	1	fleet \$85.54	\$67.39	\$250.00
Seeder with Tractor	23.00	ψ10.13	Ψ07.37	1	ψ03.54	ψ07.57	Ψ230.00
Power Mulcher (Bowie LD-90)	6.00	\$9.74	\$67.39	1	\$77.13	\$67.39	\$250.00

\$123.81

\$141.54

Subtotals: \$162.67 \$134.78 \$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, 1 T.	\$77.33	1	\$77.33	\$77.33
Crew				

Subtotale	\$77.22	\$77 22
Subtotals:	\$77.33	\$77.33

EQUIPMENT HAUL DISTANCE and Time

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

CO Total one-way travel distance: 5.00 miles Average Travel Speed: 30.00 mph

\$1,424.49

Total Non-Roadable Mob/Demob Cost *

** two round trips with haul rig:

Total Roadable Mob/Demob Cost **

\$25.78 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.33	0.33

JOB TIME AND COST

Total job time: 2.67 Hours

Total job cost: \$1,450