

Department of Natural Resources

August 13, 2024

John Nichols Nichols Gravel Pit, L.L.P. P.O. Box 285 Mesa, CO 81643

Re: Nichols Gravel Pit - File No. M-1981-013

> Nichols Gravel Pit, L.L.P. **Technical Revision (TR-4) Revise Reclaamtion Plan**

Dear John Nichols:

On August 13, 2024 the Division of Reclamation, Mining and Safety concluded its review of the Technical Revision application submitted to the Division on July 11, 2024, addressing the following:

Minor changes to the reclamation plan. 7 Ac of the pit floor will remain graveled, scales will remain post mining, update seed mix site wide, remove tree planting and use of fertilizer until deemed necessary.

The decision reached by the Division is: approve. Approve revised reclamtion plan. Bond inrease required.

The terms of Technical Revision No. 4 approved by the Division are hereby incorporated into Permit No. M-1981-013. All other conditions and requirements of Permit No. M-1981-013 remain in full force and effect.

The revised liability amount exceeds the financial warranty currently held (see below), please submit additional bond or a rider to your existing bond that equals or exceeds the Revised Liability. The revision will not be final until the bond is approved by the Division.

Bond Held:	\$115,474.00
Prior Liability:	\$115,474.00
Change in Liability:	\$5,824.00
Revised Liability:	\$121,298.00
Prior Permit Acreage:	67.50
Change in Permit Acreage:	0.00



Revised Permit Acreage:	67.50
Prior Affected Acreage:	67.50
Change in Affected Acreage:	0.00
Revised Affected Acreage:	67.50

If you have any questions, please contact me by telephone at (970) 210-1272, or by email at Amy.yeldell@state.co.us.

Sincerely,

Amy C. Yeldell

Amy Geldell

Environmental Protection Specialist

M-GR-04



August 13, 2024

John Nichols Nichols Gravel Pit L.L.P. P.O. Box 285 Mesa, CO 81643

RE: Nichols Gravel Pit, Permit No. M-1981-013, Reclamation Cost Estimate (TR-4)

Dear Mr. Nichols:

This reclamation cost update was in response to the site inspection conducted on May 14, 2024 and changes proposed under Technical Revision 4 (TR-4). The inspection documented reclamation work conducted on site as compared to the Divisions October 25, 2023 inspection. An initial estimate was provided on November 13, 2023. This estimate has since been updated to reflect current site conditions and changes to the Reclamation Plan.

Below is a table summarizing input values. Changes from the 2023 calculation are in red. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Task	Form Used	Description
01a	Dozer	Reduce all slopes to 2H:1V or less = 10,624 BCY
		North Slope Cut/Fill: 300 LF of 30'H 1:1, 100' push = 625 BCY
		Fence Corner Backfill: 400LF of 30'H 1:1, 200'push = 6,667 CCY
		SE Corner Cut/fill: 400 LF of 20'H Near vert, 100' push = 1,110 BCY
		South bench: 600 LF of 40'H 1:1, 10' push = 2,222 BCY
02a	Truck	Transport overburden (2 ft over 2.5 ac) to pit floor 8067 CCY
		Only 2.5 ac of lower pit floor need overburden replaced. 7ac to remain bare and graveled



02b	Dozer	Grade transported overburden 9,075 LCY, 50' push
03a	Truck	Truck approx. half of topsoil to north side of pit = 8,000 LCY 900 LF haul (19ac @ 6" = 15,327 CCY)
03b	Dozer	Spread transported topsoil 6" over 19 ac = 18,622 LCY, 100' push, partially consolidated
04a	Reveg	Reveg 19ac with revised seed mix Pit floor 9.5 ac – 7ac = 2.5 ac Pit slopes 16.5 ac
05a	DozGrade	Grade graveled pit floor area, 8 hrs with D2 dozers on site
10a	Mob	No equipment changes
10b	Mob	No equipment changes

Sincerely,

Amy Yeldell

**Environmental Protection Specialist** 

Amy Geldell

Ec:

Travis Marshall, Senior EPS, Grand Junction DRMS

# **COST SUMMARY WORK**

Та	sk description: Updates Per TR4				
ite: _	Nichols Gravel Pit Permit Action:	TR4	Pe	rmit/Job#:	M1981013
<u>PR</u>	OJECT IDENTIFICATION				
	Task #: ACY State: Colorado		Abbrevi	ation: Nor	ne
	Date: <u>8/13/2024</u> County: <u>Mesa</u>		File	name: M0	13-000
	User: ACY				
	Agency or organization name: DRMS				
	<u> </u>				
<u>TA</u>	SK LIST (DIRECT COSTS)				
sk		Form	Fleet	Task	
	Description	Used	Size	Hours	Cost
a	Reduce highwalls to 2H:1V	DOZER	2	10.91	\$7,051
a	Haul overburden to pit floor	TRUCK1	1	18.32	\$10,261
b	Grade transported overburden on 2.5 ac pit floor	DOZER	2	6.25	\$4,037
a	Haul topsoil to north side of pit	TRUCK1	1	19.62	\$10,990
b	Spread 6" topsoil over 19 ac	DOZER	_ 2	13.86	\$8,958
ì	Reveg on 19 ac	REVEGE	1	25.00	\$34,984
ì	Grade graveled pit floor	DOZERGRADER	_ 2	8.00	\$5,169
a	Initial Mobilization	MOBILIZE	1	4.50	\$8,125
b	Secondary Mobilization	MOBILIZE	1	4.50	\$2,098
		CHDT	OTALS:	110.96	\$91,673
		SOBI	OTALS.		
INI	DIRECT COSTS				
	ERHEAD AND PROFIT:				
<u> </u>			<b></b>	<b>01.053</b>	
	Liability insurance: 2.02 Performance bond: 1.05		Total Total	4-,	
	Job superintendent: 55.48		Total		
	Profit: 10.00		Total		
	110111. 10.00	TOT	ΓAL O & P		0
	CONT	RACT AMOUNT (direct			
I E	GAL - ENGINEERING - PROJECT MANAGEMENT				
יברי					
	Financial warranty processing (legal/related costs):	\$500	Total		
	Engineering work and/or contract/bid preparation:	4.25	Total		
	Reclamation management and/or administration:	5.00		\$5,403	
	CONTINGENCY:	3.00	Total	1 = \$2,750	

TOTAL INDIRECT COST = \$29,625

TOTAL BOND AMOUNT (direct + indirect) = \$121,298

## **BULLDOZER WORK**

Task description:	Reduce	e highwalls to 2H:1V			
Nichols Gravel Pit		Permit Action:	TR4	Permit/Job#:	M1981013
PROJECT IDENT	TIFICATIO	<u>N</u>			
Task #: 01A		State: Colorado		Abbreviation:	None
Date: 11/13/2	023	County: Mesa		Filename:	M013-01a
User: ACY		, <u> </u>		<del>-</del>	
Agency or o	rganization na	me: DRMS			
HOURLY EQUIP	MENT COS	<u>'T</u>			
	Cat D8T - 8S	U			
<u> </u>	310				
- I	Semi-Univers	al			
	NA 1 man dans				
	1 per day (CRG)				
_	(CNU)				
Cost Breakdown:			1		
Overnous Island Contact		ф172 22	<u>Utilization %</u>		
Ownership Cost/Hot Operating Cost/Hot		\$173.32 \$109.71	NA 100		
Ripper own. Cost/Hot		\$109.71	NA		
Ripper op. Cost/Hot		\$0.00	0		
Operator Cost/Hou		\$40.04	NA		
operator costriot	и.	ψτυιυτ	INA		
				<del></del>	
Total unit Cost/Hour:	\$323.07				
Total unit Cost/Hour:					
•					
Total unit Cost/Hour: Total Fleet Cost/Hour	\$646.13				
Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA	** \$646.13 **NTITIES				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume:1	** \$646.13 **NTITIES **0,264				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1	**: \$646.13 **NTITIES **0,264 *.180				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1	** \$646.13 **NTITIES **0,264				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1	**: \$646.13 **NTITIES**  0,264 .180 2,112 LCY				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1	**: \$646.13 **NTITIES**  0,264 .180  2,112 LCY  olume:				
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated volumes.	**: \$646.13 **NTITIES**  0,264 .180  2,112 LCY  olume:	Sfaff Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated volumes.	** \$646.13  **NTITIES**  0,264 .180  2,112 LCY  olume: well factor:	Sfaff Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sv.	**: \$646.13  **NTITIES**  0,264 .180 2,112 LCY  olume: well factor:	Sfaff Estimate Cat Handbook			
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1  Swell factor: 1  Loose volume: 1  Source of estimated volumes of estimated systems	**: \$646.13  **NTITIES**  0,264 .180 2,112 LCY  olume: well factor:  UCTION  e:  1	Sfaff Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sv.  HOURLY PRODU	**************************************	Sfaff Estimate Cat Handbook	embankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated volume of estimated solume of estimated solume.  HOURLY PRODU  Average push distance Unadjusted hourly product of the stance	** \$646.13  **NTITIES**  0,264 .180 2,112 LCY  olume: well factor:  UCTION  e:  description:  description:	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or 6	embankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sv.  HOURLY PRODU  Average push distance Unadjusted hourly pro  Materials consistency  Average push gradien	### \$646.13    NTITIES	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e	embankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sy  HOURLY PRODU  Average push distance Unadjusted hourly pro  Materials consistency  Average push gradien Average site altitude:	### \$646.13    NTITIES   0,264   .180   .180   .180   .12   .12   .12   .12   .12   .13   .14   .15	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e	embankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sy  HOURLY PRODU  Average push distance Unadjusted hourly pro  Materials consistency  Average push gradien Average site altitude:  Material weight:  Weight description:	\$646.13   NTITIES   0,264   .180   2,112 LCY   olume: well factor:   UCTION   e:   1   oduction:   8   description:   t:   -25 %     5,500 fe   2,400 lb   Clay and   Clay and   1     Clay and   1	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e			
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sy  HOURLY PRODU  Average push distance Unadjusted hourly pro  Materials consistency  Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correct	\$646.13   NTITIES   0,264   .180   .180   .2,112 LCY   olume: well factor:   UCTION   e:   1	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e	Source		
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated v. Source of estimated sy  HOURLY PRODU  Average push distance Unadjusted hourly pro  Materials consistency  Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correct	### 15	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e			
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUA  Initial Volume: 1 Swell factor: 1 Loose volume: 1 Source of estimated versus of estimated set.  HOURLY PRODU  Average push distance Unadjusted hourly product of the stance	### 15	Sfaff Estimate Cat Handbook  00 feet 52.6 LCY/hr  Compacted fill or e et s/LCY d gravel - Dry  0.750	Source (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6509

Adjusted unit production: 554.96 LCY/hr
Adjusted fleet production: 1109.92 LCY/hr

## **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.582/LCY

Total job time: 10.91 Hours 77,051

# TRUCK/LOADER TEAM WORK

			•	loor			
Site:	Nichols Gravel l	Pit	Permit Action	on: TR4		Permit/Job#: M	1981013
ΡΙ	ROJECT IDEN	NTIFICATION	•				
	Task #: 02A	<u> </u>	State: Color	ado	Δh	breviation: No	ne
	Date: $\frac{62A}{8/13/2}$	2024	County: Mesa	ado	Au		13-02a
	User: ACY		, <u> </u>				
	Agency or	organization nar	ne: DRMS				
<u>H</u> (	OURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: 1 per day	
		F		Equipment Descri	ption		
	1	Fruck Loader Tea		730 T 966H			
	Supp	ort Equipment -L					
			ımp Area: NA				
	Road M	Iaintenance –Mot	or Grader: NA ter Truck: NA				
		- ** a	itel Huck. IVA				
<u>Co</u>	st Breakdown:	Truck/Loa	ader Team	Support l	Equipment	Maintenan	ce Equipment
		Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utiliza	ation-machine:	100	100	NA	NA	NA	NA
Owner	ship cost/hour:	\$108.67	\$57.78	NA	NA	NA	NA
Opera	ting cost/hour:	\$66.26	\$46.25	NA	NA	NA	NA
%Ut	ilization-riper:	NA	0	NA	NA	NA	NA
	own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
	op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
	rator cost/hour:	\$24.82	\$56.64	NA	NA	NA	NA
	Unit Subtotals:	\$199.75	\$160.67	NA	NA	NA	NA
	mber of Units:	2	1	0	0	0	C
Gr	roup Subtotals:	Work:	\$560.17	Support:	\$0.00	Maint:	\$0.00
To	tal work team co	st/hour: <b>\$560.17</b>	<u>,                                      </u>				
<u>M</u>	ATERIAL QU	<u>ANTITIES</u>					
	Initial volume		CCY		factor: 1.125		
	Loose volume	: <b>9,07</b> :	LCY	•			
	So	ource of estimated	volume: 2.5ac	c @ 24"			
	Source	of estimated swe		Handbook			
		Material Purch	ase Cost: \$0.00 otal Cost: \$0.00				
		10		<i>y</i>			
$\mathbf{H}^{0}$	OURLY PRO	DUCTION					
	uck Capacity:						
	uck Capacity: uck Payload (wei	ght) Basis:					
	Material v	weight: 2,650		Pounds/LCY			
	Desci	ription: Decom	posed rock - 25%	Rock, 75% Earth	1		
	Rated Pa		1	Pounds			

Truck Travel (Haul & Return) Time:

penetration 4.0

Truck Bed (volume) Basis:  Struck Volume:  Heaped Volume:  Average Volume:						
Heaped Volume:	17.10	LCY				
Average Volume:	22.10	LCY				
	19.60	LCY				
Adjusted Volume:	22.10	LCY				
Fina	al Truck Volume	e Based on Number of	f Loader Passes:	19.50	LCY	
<b>Loading Tool Capacity</b>						
Datad Camacity	5 000	LCV (based)	Bucke	et Size Class: N	A	=
Rated Capacity: Bucket Fill Factor:	5.000 0.975	LCY (heaped)	- mixed moist aggr	ragates (05, 100%)	0.075	-
Adjusted Capacity:	4.875	LCY	- mixed moist aggi	regales (93-100%)	0.973	=
Job Condition Corrections			to Altitudo (ft.), 56	500 foot		
Job Condition Correction	Truck	Loader	te Altitude (ft.): 55  Source	<u>500</u> leet		
Altitude Adj:	1.000	1.000	(CAT HB)			
Job Efficiency:	0.830	0.830	(CAT HB)			
			(0101 100)			
Net Correction:	0.830	0.830				
<b>Loading Tool Cycle Time</b>	. Numbe	er of Loading Tool Pa	asas Daguirad to E	ill Tenals	4 r	20000
		of Loading 1001 Fa	sses Required to 1.	III TTUCK.	<del></del>	asses
Excavators and Front Shov	els:					
Machine Cycle Time						
Selected Value	within this Bas	sic Rating: NA				
Track Loaders -	– Material Desc	ription:				
Cycle Time Elements (min.	):					
Load: NA	N	Maneuver: NA		Dump: 0.100	)	
1771		- 1471		Dump. 0.100	<u>′</u>	
Wheel and Track Loaders	- Unadjusted B	asic Loader Cycle Tir	ne (load, dump, m	aneuver): 0	500 min	
			` I		.300 111111	ıtes
Cycle Time Factors				-	1	ıtes
Cycle Time Factors Material:		" to 6" diameter 0.00	. , , , , ,	Factor (min.)	Source	ites
-	Material 3/4	" to 6" diameter 0.00 dozer piled 10 ft. hig		-	1	ites 
Material:	Material 3/4' Conveyor or		h and up 0.00	Factor (min.) 0.000	Source (Cat HB)	ites
Material: Stockpile:	Material 3/4 Conveyor or Common ow	dozer piled 10 ft. hig vnership of trucks and	h and up 0.00	Factor (min.) 0.000 0.000	Source (Cat HB) (Cat HB)	utes  
Material: Stockpile: Truck Ownership:	Material 3/4 <sup>2</sup> Conveyor or Common ow Constant ope	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00	h and up 0.00 loaders -0.04	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Material: Stockpile: Truck Ownership: Operation:	Material 3/4 <sup>2</sup> Conveyor or Common ow Constant ope	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin	h and up 0.00 loaders -0.04	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Material: Stockpile: Truck Ownership: Operation:	Material 3/4 <sup>2</sup> Conveyor or Common ow Constant ope	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080 0.420	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Material: Stockpile: Truck Ownership: Operation:	Material 3/4 <sup>2</sup> Conveyor or Common ow Constant ope	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	ntes
Material: Stockpile: Truck Ownership: Operation:	Material 3/4 <sup>2</sup> Conveyor or Common ow Constant ope	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080 0.420	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	ntes
Material: Stockpile: Truck Ownership: Operation: Dump Target:	Material 3/4: Conveyor or Common ow Constant ope Nominal targ	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	h and up 0.00 loaders -0.04  ne Adjustment: er Cycle Time: ime per Truck:	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080 0.420	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	ntes
Material: Stockpile: Truck Ownership: Operation: Dump Target:  Truck Cycle Time:	Material 3/4: Conveyor or Common ow Constant ope Nominal tars	dozer piled 10 ft. hig vnership of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load Net Load T	h and up 0.00 loaders -0.04  ne Adjustment: er Cycle Time: time per Truck:	Factor (min.) 0.000 0.000 -0.040 -0.040 0.000 -0.080 0.420 1.360	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	-

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

300.00

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	4.00	4.00	1774	0.359

Haul Time: **0.359** minutes Return Route: Travel Haul Distance Grade (%) Roll. Res Total Res Velocity Seg# Time (Ft) (%) (%) (fpm) (min)

4.00

0.00

Return Time: 0.272 minutes
Total Truck Cycle Time: 3.591 minutes

2855

0.272

Loading Tool unit

Production Truck Unit Production

325.81 LCY/Hour Adjusted for job efficiency: 495.46 LCY/Hour Adjusted for job efficiency: 270.43 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 540.85 LCY/Hour Adjusted single truck/loader team production: 495.46 LCY/Hour Adjusted multiple truck/loader team production: 495.46 LCY/Hour

4.00

### **JOB TIME AND COST**

 Fleet size:
 1
 Team(s)
 Total job time:
 18.32
 Hours

 Unit cost:
 \$1.131
 /LCY
 Total job cost:
 \$10,261

# **BULLDOZER WORK**

Task description:	Grade transported overburd	den on 2.5 ac pit floor		
Nichols Gravel Pit	Permit Action:	TR4	_ Permit/Job#:	M1981013
PROJECT IDENTIFIC	<u>CATION</u>			
Task #: 02B	State: Colorado		Abbreviation:	None
Date: 8/13/2024	County: Mesa		Filename:	M013-02b
User: ACY	County <del>iviesa</del>		Thename.	141013 020
Agency or organi	ization name: DRMS			
HOURLY EQUIPMEN	NT COST			
	D8T - 8SU			
Horsepower: 310	201 030	<u>—</u>		
	i-Universal			
Attachment: NA		<del></del>		
Shift Basis: 1 per	•			
Data Source: (CRO	G)	<u> </u>		
Cost Breakdown:				
		<u>Utilization %</u>		
Ownership Cost/Hour:	\$173.32	NA		
Operating Cost/Hour:	\$109.71	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$40.04	NA		
Total unit Cost/Hour:	\$323.07			
Total Fleet Cost/Hour:	\$646.13			
<del>-</del>				
MATERIAL QUANTI	TIES			
Initial Volume: 9,075				
Swell factor: 1.000				
Loose volume: 9,075	-			
Source of estimated volum		acres		
Source of estimated swell	factor: Cat Handbook			
	TOM:			
HOURLY PRODUCT	<u>IUN</u>			
Average push distance:	50 feet			
Unadjusted hourly product				
	<del>.</del>			
Materials consistency desc	ription: Loose stockpile 1.2	,		
Average push gradient:	0 %			
Average push gradient.  Average site altitude:	5,500 feet			
Material weight:	2,650 lbs/LCY		<u> </u>	
Weight description:	Decomposed rock - 25% Rock	, 75% Earth		
Job Condition Correction I	Factor	Source		
Operator S		(AVG.)		
Material consister		(CAT HB)		
Dozing meth		(GEN.)	<del></del>	
Visibi		(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Page 2 of 2

Net correction: 0.5187

Adjusted unit production: 726.18 LCY/hr
Adjusted fleet production: 1452.36 LCY/hr

## **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.445/LCY

Total job time: 6.25 Hours
Total job cost: \$4,037

# TRUCK/LOADER TEAM WORK

Task description:	Haul to	osoil to north sid	e of pit			
Site: Nichols Gravel	Pit	Permit Action	on: TR4		Permit/Job#: M	1981013
PROJECT IDE	NTIFICATION					
Task #: 03A		State: Colora	ado	Ab	breviation: No	
Date: <u>8/13</u> User: ACY		County: Mesa			Filename: M0	013-03a
	or organization nar	ne: DRMS				
HOURLY EQU				Shift bas	is: 1 per day	
	, 5 2 32	<u> </u>	Equipment Descri			
-	Truck Loader Tea	m -Truck: Cat	730			<del></del>
			Г 966Н			
Sup	port Equipment -L Dı-	Load Area: NA MA				
Road N	Maintenance – Mot					
	-Wa	ter Truck: NA				
Cost Breakdown:	Truck/Lo	ader Team	Support I	Equipment	Maintenan	ce Equipment
Cost Dieakuowii.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
% Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.67	\$57.78	NA NA	NA NA	NA NA	NA NA
Operating cost/hour:	\$66.26	\$46.25	NA NA	NA NA	NA NA	NA NA
%Utilization-riper:	NA	0	NA NA	NA NA	NA NA	NA NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$24.82	\$56.64	NA	NA	NA	NA
Unit Subtotals:	\$199.75	\$160.67	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work:	\$560.17	Support:	\$0.00	Maint:	\$0.00
Total work team co	ost/hour: <b>\$560.17</b>	•				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume	e: 8,000	CCY	Swell	factor: 1.215		
Loose volume	e: <b>9,72</b> 0	D LCY				
S	ource of estimated	volume: 19ac	@ 6", half transpo	orted		
Sourc	e of estimated swe		Iandbook			
	Material Purch					
	10	otal Cost: \$0.00	)			
<b>HOURLY PRO</b>	<u>ODUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material	weight: 1,600		Pounds/LCY			
Desc Rated P	eription: Top So Payload: 62,000		Pounds			
Payload C			Pounds LCY			
2 47 20 44 0						

Truck Travel (Haul & Return) Time:

penetration 4.0

Truck Bed (volume) Basis:  Struck Volume:  Heaped Volume:						
Heaped Volume:	17.10 I	LCY				
	22.10 I	LCY				
Average Volume:	19.60 I	LCY				
Adjusted Volume:	22.10 I	LCY				
Fina	l Truck Volume	Based on Number of Loa	ader Passes:	19.50	LCY	
Loading Tool Capacity						
Rated Capacity:	5.000	LCY (heaped)	Buck	tet Size Class: N	A	_
Bucket Fill Factor:	0.975	Loose material - mi	xed moist ago	regates (95-100%)	0.975	_
Adjusted Capacity:	4.875	LCY	aca moist age	<u> </u>	0.575	=
Job Condition Corrections	s <u>:</u>	Site A	ltitude (ft.): <u>5</u>	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB			
Job Efficiency:	0.830	0.830	(CAT HB	)		
Net Correction:	0.830	0.830				
ret correction.	0.050	0.050				
<b>Loading Tool Cycle Times</b>	Number N	of Loading Tool Passes	Required to I	Fill Truck:	I	oasses
Excavators and Front Shove	els:					
Machine Cycle Time	vs. Job Condition	Rating: NA				
	within this Basic					
Track Loaders -	- Material Descri	ption:				
Cycle Time Elements (min.)	):					
Load: NA	Ma	aneuver: NA		Dump: 0.100		
Wheel and Track Loaders	— Unadjusted Day	via Landar Cyala Tima (1	ood dumn m		500 mini	itas
	- Offaujusted Bas	sic Loader Cycle Time (i	oau, uump, m	· ·		nes
Cycle Time Factors Material:	Motorial 2/4"	to 6" diameter 0.00		Factor (min.) 0.000	Source (Cat HB)	_
Stockpile:		lozer piled 10 ft. high an	d up 0 00	0.000	(Cat HB)	_
Truck Ownership:		ership of trucks and load		-0.040	(Cat IID)	
Track o whership.	Constant opera		:C15 0.0 i		(Cat HB)	_
Operation:				-0.040	(Cat HB)	_
Operation: Dump Target:	Nominal targe			-0.040 0.000	(Cat HB)	_ _ _
Operation: Dump Target:	Nominal targe		djustment:	-0.040 0.000 -0.080		_ _ _
<b>:</b>	Nominal targe	et 0.00	_	0.000	(Cat HB) (Cat HB)	
<b>:</b>	Nominal targe	t 0.00 Net Cycle Time A	ycle Time:	0.000 -0.080	(Cat HB) (Cat HB) minutes	
<b>:</b>	Nominal targe	t 0.00 Net Cycle Time A Adjusted Loader C	ycle Time:	0.000 -0.080 <b>0.420</b>	(Cat HB) (Cat HB) minutes minutes	- - -
Dump Target:		t 0.00 Net Cycle Time A Adjusted Loader C	ycle Time: _ per Truck: _	0.000 -0.080 <b>0.420</b>	(Cat HB) (Cat HB) minutes minutes	Minut
Dump Target:  Truck Cycle Time:	e: 0.60	Net Cycle Time A Adjusted Loader C Net Load Time	ycle Time: _ per Truck: _ Adjusted	0.000 -0.080 <b>0.420</b> <b>1.360</b>	(Cat HB) (Cat HB) minutes minutes minutes	Minuto

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	4.00	4.00	1774	0.528

Haul Time: **0.528** minutes Return Route: Travel Haul Distance Grade (%) Roll. Res Total Res Velocity Seg# Time (Ft) (%) (%) (fpm) (min) 0.00 4.00 4.00 600.00 2855 0.378

Return Time: 0.378 minutes
Total Truck Cycle Time: 3.866 minutes

Loading Tool unit

Production 596.94 LCY/Hour Adjusted for job efficiency: 495.46 LCY/Hour Truck Unit Production 302.64 LCY/Hour Adjusted for job efficiency: 251.19 LCY/Hour

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

Adjusted hourly truck team production: 502.38 LCY/Hour Adjusted single truck/loader team production: 495.46 LCY/Hour Adjusted multiple truck/loader team production: 495.46 LCY/Hour

### **JOB TIME AND COST**

 Fleet size:
 1
 Team(s)
 Total job time:
 19.62
 Hours

 Unit cost:
 \$1.131
 /LCY
 Total job cost:
 \$10,990

# **BULLDOZER WORK**

	Sprea	nd 6" topsoil over 19 ac			
: Nichols Gravel	Pit	Permit Action:	TR4	_ Permit/Job#:	M1981013
PROJECT IDE	NTIFICATIO	<u>DN</u>			
Task #: 03B		State: Colorado		Abbreviation:	None
	/2024	County: Mesa		Filename:	M013-03b
User: ACY				<u>-</u>	1,1010 000
Agency	or organization	name: DRMS			
<b>HOURLY EQU</b>	IPMENT CO	<u>ost</u>			
Basic Machine:	Cat D8T - 8	SU			
Horsepower:					
Blade Type:	Semi-Unive	rsal			
Attachment:					
Shift Basis:					
Data Source:	(CRG)				
Cost Breakdown:					
2000 Dicardowii.			<u>Utilization %</u>		
Ownership Cost/	Hour:	\$173.32	NA		
Operating Cost/		\$109.71	100		
Ripper own. Cost/		\$0.00	NA	<del></del>	
Ripper op. Cost/		\$0.00	0	<del></del>	
Operator Cost/		\$40.04	NA		
Total Fleet Cost/H  MATERIAL Q		77 .3			
MATERIAL QUINTER Initial Volume:	<u>UANTITIES</u>				
MATERIAL Q	UANTITIES				
MATERIAL QUARTERIAL Q	18,622 1.000 18,622 LCY ed volume: ed swell factor:				
MATERIAL QUARTERIAL QU	18,622 1.000 18,622 LCY ed volume: ed swell factor:	6" topsoil over 19 ac Cat Handbook			
MATERIAL QUARTERIAL Q	18,622 1.000 18,622 LCY and volume: and swell factor:	6" topsoil over 19 ac			
MATERIAL QUARTERIAL QU	18,622 1.000 18,622 LCY and volume: and swell factor: DUCTION ance:	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr	stockpile 1.1		
MATERIAL QUESTION Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad	18,622 1.000 18,622 LCY ad volume: ad swell factor: DUCTION ance: production: ncy description:	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr  Partly consolidated	stockpile 1.1		
MATERIAL QUE Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grad Average site altitu	18,622   1.000   18,622 LCY   2d volume: ed swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr  Partly consolidated	stockpile 1.1		
MATERIAL QUARTERIAL QUARTERIAL QUARTERIAL QUARTERIAL QUARTERIAL VOICE Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grad Average site altitut Material weight:	18,622   1.000   18,622 LCY   2d volume: ad swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr Partly consolidated  feet  lbs/LCY	stockpile 1.1		
Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grad Average site altitu Material weight: Weight description	18,622   1.000   18,622 LCY   2d volume: ad swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr Partly consolidated  feet  lbs/LCY			
Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grac Average site altitu Material weight: Weight description Job Condition Cor	18,622   1.000   18,622 LCY   2d volume: ad swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr Partly consolidated  feet  lbs/LCY	stockpile 1.1  Source (AVG.)		
Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grac Average site altitu Material weight: Weight description Job Condition Cor Op Material	18,622   1.000   18,622 LCY   2d volume: ad swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr  Partly consolidated  feet  lbs/LCY  oil  0.750 1.100	Source		
Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grac Average site altitu Material weight: Weight description Job Condition Cor Op Material	18,622   1.000   18,622 LCY   1.000   18,622 LCY   1.000   1	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr Partly consolidated  feet  105/LCY  1100 1.000	Source (AVG.) (CAT HB) (GEN.)		
Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grac Average site altitu Material weight: Weight description Job Condition Cor Op Material	18,622   1.000   18,622 LCY   2d volume: ad swell factor:   2DUCTION   2d production:   2	6" topsoil over 19 ac Cat Handbook  100 feet 852.6 LCY/hr  Partly consolidated  feet  lbs/LCY  oil  0.750 1.100	Source (AVG.) (CAT HB)		

Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: 671.59 LCY/hr
Adjusted fleet production: 1343.18 LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.481/LCY

Total job time: 13.86 Hours
Total job cost: \$8,958

# **REVEGETATION WORK**

Nichols Gravel Pit Permit Action: TR4 Permit/Job#:			#: <u>M1981013</u>		
ROJECT IDENTIFICA	TION				
Task #: 04A		orado		Abbreviation:	None
Date: 8/13/2024 User: ACY	County: Mesa F			Filename:	M013-04a
Agency or organiza	tion name: DRMS				
ERTILIZING					
<b>I</b> aterials					
Description		Units / Acre	Unit	Cost / Unit	Cost /Acre
				\$	\$
				Total Fertilizer Materials Cost/Acre	\$0.00
pplication  Description					Cost /Acre
					\$
		Total	Fertilizer A	application Cost/Acre	\$0.00
<u> ILLING</u>					Cost /Acre
Description					
	MEANS 32 91 13.23 6	100)			\$117.61

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	0.15	0.49	\$2.59
Sand Dropseed	0.05	5.97	\$0.65
Rye, Perennial Tetraploid - Tetra-Plus	2.25	12.76	\$5.12
Sandberg Bluegrass - VNS	0.15	3.19	\$2.17
Intermediate Wheatgrass - Rush	2.40	5.12	\$11.35
Pubescent Wheatgrass - VNS	2.40	4.96	\$13.55
Slender Wheatgrass - Native	1.80	6.57	\$12.72
Milk Vetch, Cicer - Monarch	0.50	1.66	\$4.78
Sainfoin - Remont	3.00	1.31	\$11.09
Flax, Lewis Blue	0.20	1.33	\$8.46

\$73.65

Winter Fat

	0.03	0.06	\$1.17
Totals Seed Mix	12 93	43.41	Φ <b>=</b> 2 ( <b>=</b>

12.93

**Application** 

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

**Totals Seed Mix** 

#### **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$989.69

Application

Description		Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)		\$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]		\$83.26
	<b>Total Mulch Application Cost/Acre</b>	\$240.51

### **NURSERY STOCK PLANTING**

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

#### **JOB TIME AND COST**

No. of Acres: 16.5 Cost /Acre: \$1,658.10 Cost /Acre\*: \$1,540.49

Estimated Failure Rate: 30%

\*Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: \$27,358.65 Reseeding Job Cost: \$7,625.43 Total Job Cost: **\$34,984** Job Hours: **25.00** 

## **DOZERGRADER WORK**

Nichols Gravel Pit	Permit Action:	TR4	Permit/Job#:	M1981013
PROJECT IDENTIF	<u>TICATION</u>			
Task #: 05A Date: 8/13/2024	State: Colorado County: Mesa		Abbreviation: Filename:	None M013-05a
User: <u>ACY</u> Agency or orga	nnization name:DRMS			
HOURLY EQUIPMI	ENT COST			
	t D8T - 8SU			
Horsepower:				
Blade Type:				
Attachment: NA Shift Basis: 1 p	er day			
Data Source:	oci day	<u>—</u>		
Cost Breakdown:		1		
	Ф172.22	<u>Utilization %</u>		
Ownership Cost/Hour:	\$173.32 \$109.71	NA 100		
Operating Cost/Hour: Ripper own. Cost/Hour:	\$109.71	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$40.04	NA		
Total unit Cost/Hour:	\$323.07			
Total Fleet Cost/Hour:	\$646.13			

Fleet size: 2 Dozer(s)
Unit cost: \$646.13/LCY

Total job time: 8.00 Hours
Total job cost: \$5,169

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: In	itial Mobilization	l .		
te: Nichols Gravel Pit	Permi	t Action: TR4	Permit/	Job#: M1981013
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: 10A Date: 8/13/2024 User: ACY		colorado Mesa	Abbreviation Filename	
Agency or organization	on name: DRMS	S		
Truck Tractor Des		ERIC ON-HIGHW	Shift basis: Cost Data Source: AY TRUCK TRACTOR, 6X	1 per day CRG Data 4, DIESEL POWERED,
Truck Trailer Des	cription:		400 HP (2ND HALF, 2006) NG GOOSENECK, DROP DE AILER (25T, 50T, AND 100	~
Cost Breakdown:			, , ,	
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94	
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65	
Operator Cost/Hour	\$22.52	\$22.52	\$22.52	

### **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

Helper Cost/Hour:

\$0.00

\$59.44

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	47.71	\$173.32	\$122.78	2	\$592.20	\$245.56	\$250.00
Drill/Broadcast	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
(Bowie LD-90)							
CAT 966H	25.80	\$57.78	\$59.44	1	\$117.22	\$59.44	\$250.00
Cat 730	25.19	\$108.67	\$59.44	2	\$336.22	\$118.88	\$500.00

\$23.53

\$122.78

\$23.53

\$125.64

Subtotals: \$1,232.75 \$542.76 \$1,500.00

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$78.53	1	\$78.53	\$78.53
Light Duty Pickup, 4x4, 1 T.	\$136.70	2	\$273.40	\$273.40
Crew				

Subtotals:	\$351.93	\$351.93	

### **EQUIPMENT HAUL DISTANCE and Time**

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

Task # 10A

Total one-way travel distance:

Average Travel Speed:

CO

25.00

miles

40.00

mph

Total Non-Roadable Mob/Demob Cost \*

'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

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

\$439.91

\$7,684.89

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.63	0.63
Return Time (Hours):	0.63	0.63
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.25	1.25

#### **JOB TIME AND COST**

Total job time: 4.50 Hours

Total job cost: **\$8,125** 

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Se	econdary Mobiliza	ation		
te: Nichols Gravel Pit	Permi	t Action: TR4	Permit/J	ob#: <u>M1981013</u>
PROJECT IDENTIFICAT	<u> TION</u>			
Task #: 10B Date: 8/13/2024 User: ACY		Colorado Mesa	Abbreviation: Filename:	
Agency or organizati	on name: DRM	S		
EQUIPMENT TRANSPO	RT RIG COST		Shift basis: Cost Data Source:	1 per day CRG Data
Truck Tractor Des	scription: GENI		AY TRUCK TRACTOR, 6X4 400 HP (2ND HALF, 2006)	, DIESEL POWERED,
Truck Trailer De	scription: C	GENERIC FOLDIN	IG GOOSENECK, DROP DE AILER (25T, 50T, AND 100T	~
Cost Breakdown:  Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94	
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65	
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52	
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53	
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64	

## **NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit	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
T. T.	(TONS)		t		fleet		
Drill/Broadcast	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
(Bowie LD-90)							

Subtotals: \$187.11 \$118.88 \$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.	\$136.70	2	\$273.40	\$273.40
Crew				

Subtotals: \$273.40 \$273.40

### **EQUIPMENT HAUL DISTANCE and Time**

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

CO Total one-way travel distance: 25.00 miles

\$1,756.71

Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost \*

\*\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

\$341.75 \*\* one round trip, no haul rig:

#### **Transportation Cycle Time:**

Non-	
Roadable	Roadable
Equipment	Equipment
0.63	0.63
0.63	0.63
0.50	NA
0.50	NA
2.25	1.25
	Roadable Equipment 0.63 0.63 0.50

#### **JOB TIME AND COST**

Total job time: 4.50 Hours

Total job cost: \$2,098