# STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106



Jason Burkey Oldcastle SW Group, Inc. P.O. Box 3609 Grand Junction, CO 81506



John W. Hickenlooper Governor

Mike King Executive Director

Loretta Piñeda Director

RE: Anderson Pit, Permit No. M-2005-021, Reclamation Costs Update and Notice of Surety Increase SI-1

Dear Mr. Burkey:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). *Therefore, pursuant to Section 34–32.5–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.* The additional amount needs to be accepted prior to Friday, March 22, 2013. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be  $\frac{$230,100.00}{0}$ . This is an increase of  $\frac{$64,847.00}{0}$  over the  $\frac{$165,253.00}{0}$  currently held by the Division. This estimate is based on conditions observed during the March 20, 2013 inspection.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely. Dustin Crapla

Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety 101 South 3<sup>rd</sup>, Suite 301 Grand Junction, CO 81501 Phone: (970) 243-6299 Fax: (970) 241-1516

Enc: Financial Warranty Cost Estimate

#### COST SUMMARY WORK

#### Task description: Review adequacy of financial warranty based on conditions observed during March 20, 2013 inspection. Permit Action: 2013-03-20 Site: Anderson Pit Inspection Permit/Job#: M2005021 **PROJECT IDENTIFICATION** Task #: 000 State: Colorado Abbreviation: None Date: 3/22/2013 County: Delta M021-000 Filename: User: DMC

Agency or organization name: DRMS

#### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet	Task Hours	Cost
01a			Size		
	Demolition and disposal of structures	DEMOLISH		40.00	\$96,244.77
02a	Dewater current pit	PUMPING	1	105.64	\$6,780.00
03a	Cut slopes to 3H:1V / rough finish grading	DOZER	] 1	30.68	\$6,079.81
04a	Rip compacted areas prior to topsoil replacement	RIPPER	] 1	30.32	\$6,399.00
05a	Replace topsoil over stripped areas	DOZER	1	70.54	\$13,977.64
06a	Revegetate disturbed area	REVEGE	1	35.00	\$51,599.63
06b	Vegetate wetland perimeter	REVEGE	] 1	1.00	\$1,338.74
07a	Mobilize reclamation crew and equipment	MOBILIZE	] 1	2.80	\$2,685.97
	SUBTOTALS:				\$185,105.56

#### **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

Liability insurance:	2.02%	Total =	\$3,739.13
Performance bond:	1.05%	Total =	\$1,943.61
Job superintendent:	142.89 hrs	Total =	\$9,346.43
Profit:	10.00%	Total =	\$18,510.56
		TOTAL O & P =	\$33,539.73
		CONTRACT AMOUNT (direct + O & P) =	\$218,645.29

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation:	500.00	Total = Total =	500.00 \$0.00
Reclamation management and/or administration:	5.00%		\$10,932.26
CONTINGENCY:	0.00	Total =	\$0.00
	TOTAL	INDIRECT COST =	\$44,971.99
ΤΟΤΑΙ.Β	OND A MOUNT	(direct + indirect) -	\$230 100 00

TOTAL BOND AMOUNT (direct + indirect) = \_\_\_\_\_\$230,100.00

#### **DEMOLITION WORK**

Task description:		Demolition and disposal of structures				
Site:	Anderson Pit		Permit Action:	2013-03-20 Inspection	Permit/J	ob#: M2005021
PROJE	CT IDENTIFICATIO	N				
Task #:	01A	State:	Colorado	Ab	breviation:	None
Date:	3/22/2013	County:	Delta		Filename:	M021-01a
User:	DMC	-			-	

Location adjustment: 98.20 %

Agency or organization name: DRMS

#### **UNIT COSTS**

#### Structure or Item **Demolition Menu** Unit Total Cost Dimensions Quantity Unit Description Selection Cost Concrete plant slab 60' x 90' x 6" Demo. and on-site 5,400.00 SF \$1.70 \$9,169.20 disposal in excavated pit, 6 in. thick - Max. 200 ft. push Concrete plant l' x 1' x 304' Demo. and on-site 304.00 LF \$6.79 \$2.064.46 building stemwall disposal in excavated pit, 1.0 ft. x 2 ft. - Max. 200 ft. push Concrete plant 5 @ 10' x 1.5' x Demo. and on-site 200.00 SF \$3.40 \$679.20 foundation pads 4' disposal in excavated pit, 12 in. thick - Max. 200 ft. push Truck scale 700 s.f. Demo. and on-site 700.00 SF \$2.26 \$1,584.80 foundation disposal in excavated pit, 8 in. thick - Max. 200 ft. push Fuel storage slab 24' x 36' Demo. and on-site 864.00 SF \$1.70 \$1,467.07 disposal in excavated pit, 6 in. thick - Max, 200 ft. push Concrete plant (60' x 90' x Bldg. (MN) demo./off-67,500.00 CF \$1.05 \$70,605.00 building, machinery in 25').5 site disposal in approved half of bldg landfill - Max. 5 mile haul Concrete plant feeder 50' Conveyor, elevated, 50.00 LF \$43.17 \$2,158.50 conveyor including supports - 5 ft. W x 6 ft. H housing Section of sediment 20" diameter x Pipe, sewer/water - 21 to 85.00 LF \$9.42 \$800.70 pond discharge pipe 85' 24 in. diameter pipe Disposal fees for steel 1000 c.y. Loading and 5 mile haul, 1,000.00 CY \$9.48 \$9,480.00 salvage allowed - Steel frame structures

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	40.00	(unadjusted):	\$98,008.93	location):	\$96,244.77

Task description:	Dewater	<u>PUMPIN</u> current pit			
: Anderson Pit	Dewater	Permit Action:	2013-03-20 Inspection	D	N0005001
		I chilit Action.	2013-03-20 Inspection	Permit/Job#:	M2005021
PROJECT IDENTI	FICATION				
Task #: 02A		State: Colorado		Abbreviation:	None
Date: 3/22/2013	C	ounty: Delta		Filename:	M021-02a
User: DMC					
Agency or orga	anization name	e: DRMS			
HOURLY EQUIPM	ENT COST				
	Description	n		Quantity	
Make and Model:		1 pump - 200M, 10		1	
Attachment I:		be - 10 in. diam., 25		I	
Attachment 2:	<u>_</u>	pipe - 10 in. D., 25	<u>ft.</u>	12	
Labor Unit 1:	<u>I'</u> I	ator (same as 1st)		1	
Horsepower: Shift Basis:I	70				
	per day 1.95			-	
Weight:(U	JS Tons)				
Cost Breakdown:					
_			Utilization %		
Ownership Cost/		\$20.67	NA		
Operating Cost/		\$20.57	100		
Operator Cost/		\$22.94	NA		
Total Unit Cost/	/Hour:	\$64.18			
Total Fleet Cost		\$64.18			
Total Fleet Cost PUMPING QUANTI	t/Hour:				
PUMPING QUANTI Initial Pond Vo	t/Hour: ITIES lume:			Conversion factor:	325850.5800
PUMPING QUANTI Initial Pond Vo Final Pond Vo	t/Hour: ITIES Iume: Iume:	\$64.18	gallons	Conversion factor:	325850.5800
PUMPING QUANTI Initial Pond Vo	t/Hour: ITIES Iume: Iume:	\$64.18 100.00 <b>32,585,058.00</b>	gallons	Conversion factor: Unit inflow rate in	325850.5800
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su	t/Hour: ITIES lume: lume: urface Area:	\$64.18 100.00			0.3516
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo	t/Hour: ITIES lume: lume: urface Area: olume	\$64.18 100.00 <b>32,585,058.00</b> 10,000	gallons Sq. ft.	Unit inflow rate in	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo	t/Hour: ITIES lume: lume: urface Area:	\$64.18 100.00 <b>32,585,058.00</b>	gallons	Unit inflow rate in	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per	t/Hour: ITIES lume: lume: urface Area: olume	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00	gallons Sq. ft.	Unit inflow rate in	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per	t/Hour: ITIES lume: lume: urface Area: olume Hour:	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00	gallons Sq. ft.	Unit inflow rate in	
PUMPING QUANT Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma	t/Hour: ITIES Iume: Iume: Iume: Area: Olume Hour: of estimated v	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity:	gallons Sq. ft.	Unit inflow rate in gph/sq. ft.:	
PUMPING QUANT Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma	t/Hour: ITIES Iume: Iume: Iume: Area: Olume Hour: Of estimated v	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity:	gallons Sq. ft. gallons	Unit inflow rate in	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma E	t/Hour: ITIES Iume: Iume: Iume: Area: Olume Hour: of estimated v	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head:	gallons Sq. ft. gallons 200,000	Unit inflow rate in gph/sq. ft.: gph/pump	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma E	t/Hour: ITIES Jume: Jume: Jurface Area: Jurface Area: Jume Hour: of estimated v iximum Pump Estimated Suct imated Discha	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: cotal Head:	gallons Sq. ft. gallons 200,000 15 15 30	Unit inflow rate in gph/sq. ft.: gph/pump feet	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma E	t/Hour: ITIES lume: lume: urface Area: olume Hour: of estimated v tximum Pump Estimated Suct imated Discha CPB Pump	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: otal Head: Capacity:	gallons Sq. ft. gallons 200,000 15 15 30 168,000	Unit inflow rate in gph/sq. ft.: gph/pump feet feet	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma E	t/Hour: ITIES lume: lume: urface Area: olume Hour: of estimated v tximum Pump Estimated Suct imated Discha CPB Pump	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: cotal Head:	gallons Sq. ft. gallons 200,000 15 15 30	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti	t/Hour: ITIES lume: urface Area: olume Hour: of estimated v iximum Pump Estimated Suct imated Discha CPB Pump Site	\$64.18 100.00 32,585,058.00 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: capacity: capacity: e Altitude:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adjus	t/Hour: ITIES lume: lume: urface Area: olume Hour: of estimated v iximum Pump Estimated Discha CPB Pump Site sted Pumping	\$64.18 100.00 32,585,058.00 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: otal Head: Capacity: e Altitude: Capacity:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adjue Initial Una	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v iximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pumping	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: capacity: capacity: e Altitude: Capacity: for a construction of the construction o	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adju: Initial Una Inflow	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v eximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pump during Initial	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: Capacity: capacity: e Altitude: Capacity: pumping:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adju: Initial Una Inflow Net Una	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v eximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pump	\$64.18 100.00 <b>32,585,058.00</b> 10,000 3,516.00 20lume: Maps Capacity: ion Head: rge Head: capacity: btal Head: Capacity: capacity: capacity: mig Time: Pumping: ing Time:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959 198.02	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons Hours	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adju: Initial Una Inflow Net Una Altit	t/Hour: ITIES lume: lume: urface Area: olume Hour: of estimated v eximum Pump Estimated Discha CPB Pump Site sted Pumping adjusted Pump tude Adjustme	\$64.18 100.00 32,585,058.00 10,000 3,516.00 volume: Maps Capacity: ion Head: rge Head: capacity: e Altitude: Capacity: ing Time: Pumping: ing Time: nt Factor:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959 198.02 0.9700	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons Hours (3% rule)	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adjue Initial Una Inflow Net Una Altit F	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v eximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pump	\$64.18  100.00  32,585,058.00  10,000  3,516.00  volume: Maps  Capacity: ion Head: rge Head: Datal Head: Capacity: ing Time: Pumping: ing Time: nt Factor: cy Factor:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959 198.02	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons Hours	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adjue Initial Una Inflow Net Una Altit F	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v eximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pump during Initial adjusted Pump tude Adjustme Pump Efficience adjusted Pump	\$64.18  100.00  32,585,058.00  10,000  3,516.00  volume: Maps  Capacity: ion Head: rge Head: Datal Head: Capacity: ing Time: Pumping: ing Time: nt Factor: cy Factor:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959 198.02 0.9700 0.9167	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons Hours (3% rule) (55 min./hr.)	
PUMPING QUANTI Initial Pond Vo Final Pond Vo Total Pond Inflow Su Total Pond Inflow Vo per Source PUMPING TIME Ma Esti Adju: Initial Una Inflow Net Una Altit F Total A	t/Hour: ITIES lume: lume: lume: lume: Area: olume Hour: of estimated v eximum Pump Estimated Suct imated Discha CPB Pump Site sted Pumping adjusted Pump during Initial adjusted Pump tude Adjustme Pump Efficience adjusted Pump	\$64.18  100.00  32,585,058.00  10,000  3,516.00  volume: Maps  Capacity: ion Head: rge Head: Datal Head: Capacity: ing Time: Pumping: ing Time: nt Factor: cy Factor:	gallons Sq. ft. gallons 200,000 15 15 30 168,000 5,000 168,000 193.96 681,959 198.02 0.9700 0.9167	Unit inflow rate in gph/sq. ft.: gph/pump feet feet feet gph/pump feet gph hours gallons Hours (3% rule) (55 min./hr.) hours	

			<u>ER WORK</u>		
Task description:	Cut slopes to 3H	:1V and ren	naining site grading		
Anderson Pit	Per	mit Action:	2013-03-20 Inspection	Permit/Job#:	M2005021
PROJECT IDENTIF	<b>ICATION</b>				
Task #:03A	State:	Colorado		Abbreviation:	None
Date: 3/22/2013 User: DMC	County:	Delta		Filename:	M021-03a
······					
Agency or orga	mzation name. Dr	RMS			
HOURLY EQUIPME	ENT COST				
	t D8T - 8U				
Horsepower: 310					
	iversal				
Attachment: NA Shift Basis: 1 n					
	er day RG)				
Cost Breakdown:					
	*** * *-		Utilization %		
Ownership Cost/Hour:	\$56.69		NA		
Operating Cost/Hour: Ripper op. Cost/Hour:	\$104.06	F	100		
Operator Cost/Hour:	\$0.00		0		
-	\$37.41		NA		
Total unit Cost/Hour:	\$198.16				
Total Fleet Cost/Hour:	\$198.16				
MATERIAL QUANT	TITIES				
Initial Volume: 15,0					
Swell factor: 1.00					
	000 LCY				
Source of estimated volu	me: Division	of Reclamati	on, Mining & Safety		
			on, winning & Salety		
	1 factor: Cat Hand	book			
Source of estimated swel	l factor: Cat Hand	book			
		book			
Source of estimated swel	TION	lbook			
Source of estimated swel	TION 100 feet				
Source of estimated swel HOURLY PRODUC Average push distance:	100 feet           ction:         931.6 LCY/	/hr	stockpile 1.1		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produced Materials consistency des	TION 100 feet ction: 931.6 LCY/ scription: Partly of	/hr	stockpile 1.1	4	
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	TION 100 feet ction: 931.6 LCY/ scription: Partly of 0 %	/hr	stockpile 1.1	14 (2)	
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produced Materials consistency des	TION 100 feet ction: 931.6 LCY/ scription: Partly of	/hr	stockpile 1.1		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	TION 100 feet ction: 931.6 LCY/ scription: Partly of 0 %	/hr	stockpile 1.1		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude:	100 feet           ction:         931.6 LCY/           scription:         Partly of           0 %         5,000 feet	/hr consolidated	stockpile 1.1		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction	100 feet         ction:       931.6 LCY/         scription:       Partly of         0 %       5,000 feet         2,400 lbs/LCY       Clay and gravel - In         Clay and gravel - In       Factor	/hr consolidated	stockpile 1.1		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: <u>Job Condition Correction</u> Operator	100 feet         ction:       931.6 LCY/         scription:       Partly of         0 %       5,000 feet         2,400 lbs/LCY       Clay and gravel - 1         Clay and gravel - 1       0         Factor       0.         Skill:       0.	/hr consolidated  Dry 750	<u>Source</u> (AVG.)		
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction	100 feet           ction:         931.6 LCY/           scription:         Partly of           0 %         5,000 feet           2,400 lbs/LCY         Clay and gravel - I           h Factor         Skill:         0.           ency:         1.	/hr consolidated	Source		

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Page 1 of 1

Bulldozer	Worksheet	Cont'd
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Task # 03A

Visibility:	1.000	(AVG.)
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:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5248

Adjusted unit production:	488.90 LCY/hr
Adjusted fleet production:	488.9 LCY/hr

#### JOB TIME AND COST

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.405/LCY	

Total job time:	30.68 Hours	
Total job cost:	\$6,079.81	

		$\bigcirc$	BULLDOZER	<u>RIPPING WOR</u>	к 🔘	
	Task description:			to topsoil replace		
Site	-			2013-03-20 Insp		: M2005021
	PROJECT IDE	NTIFICATION				
	Task #: 04A		State: Colorado		Abbreviation:	None
	Date: 3/22/	/2013 Co	ounty: Delta		Filename:	M021-04a
	User: DMC	1.0				
		r organization name	: DRMS			
	HOURLY EQU	IPMENT COST				
	Basic M	-			Horsepower:	310
	Ripper Attac	hment: 3-Shank	Kipper			oer day CRG)
	Cost Breakdown:					
			<i></i>		Jtilization %	
		Ownership Cost/Ho Operating Cost/Ho		3.00	NA 100	
	Rippe	r Operating Cost/Ho	our: \$0	5.53	100	
		Operator Cost/Ho		7.41	NA	
		Total Unit Cost/Ho	our: \$2	1.01		
		Total Fleet Cost/Ho	our: \$21	1.01		
	MATERIAL QU	<b>JANTITIES</b>	Se	lected estimating n	nethod: Area	
	Alternate Methods	<u>.</u>				
Seismic:	NA		Bank Volume:	NA	BCY	NA
Area:	15.00	acres	Rip Depth (ft):	2.00	Volume: 48,400	BCY or CCY
		Source of estimated	quantity: Inspec	ction observations		
	HOURLY PRO	DUCTION				
	Seismic:					
÷.		Seism	ic Velocity:	NA	feet/second	
	<u>Area:</u>	Augus as Dia	-in- Douth	2.00	,	5
		Average Rip Average Rip		2.00 7.08	mph degrees	
		Average Ripp		50.00	feet	
			ozer Speed:	88.00	feet	
		Average Man	euver Time:	0.25	feet	
		Production p	er unit area:	0.596	acres/hour	
	Job Condition Corr	rection Factors				
	Unac	ljusted Hourly Unit	Production:	0.596	Acres/hr	
		S	ite Altitude:	5,000	feet	
			ltitude Adj:	1.00	(CAT HB)	
			Efficiency:	0.83	(1 shift/day)	
		Net	Correction:	0.83	multiplier	
		· · · ·	y Unit Production		Acres/hr	
		Adjusted Hourl	y Fleet Production	0.49	Acres/hr	
	JOB TIME ANI	<u>D COST</u>				
	Fleet size:	Gra	der(s)	Total job time:	30.32	Hours
	Unit cost:	\$426.588 Per	acre	Total job cost:	\$6,399.00	

### BULLDOZER WORK

Task description:	Replace topsoil over strippe	d areas		
Anderson Pit	Permit Action:	2013-03-20 Inspection	Permit/Job#:	M2005021
PROJECT IDENTIF	<b>ICATION</b>			
Task #: 05A	State: Colorado		Abbreviation:	None
Date: 3/22/2013	County: Delta		Filename:	M021-05a
User: DMC				
Agency or orga	nization name: DRMS			
HOURLY EQUIPMI	ENT COST			
Basic Machine: Ca	t D8T - 8U			
Horsepower: 31	D			
Blade Type: Un	iversal			
Attachment: NA	A			
Shift Basis: 1 p	er day			
	RG)			
Cost Breakdown:				
Cost Dicardown.		Utilization %		
Ownership Cost/Hour:	\$56.69	NA		
Operating Cost/Hour:	\$104.06	100		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$37.41	NA		
•	· · · · · · · · · · · · · · · · · · ·			
Total unit Cost/Hour:	\$198.16			
Total Fleet Cost/Hour:	\$198.16			
MATERIAL OLIANS	DITITIO			
MATERIAL QUANT	<u>TITIES</u>			
Initial Volume: 56,4	466			
Swell factor: 1.00				
Loose volume: 56,4	166 LCY			
Source of estimated volu Source of estimated swe				
HOURLY PRODUC	TION			
Average push distance:	100 feet			
Unadjusted hourly produ	ection: 931.6 LCY/hr			
Materials consistency de	scription: Loose stockpile 1.2	2		
Average push gradient:	0 %			
Average site altitude:	5,000 feet			
-				
Material weight:	1,600 lbs/LCY			
Weight description:	Top Soil			
Job Condition Correction	n Factor	Source		
Operator		(AVG.)		
Material consis		(CAT HB)	0.00	
Dozing m	ethod: 1.000	(GEN.)		

Page 1 of 1

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

Adjusted unit production:	800.52 LCY/hr	
Adjusted fleet production:	800.52 LCY/hr	

### JOB TIME AND COST

 $\langle \varphi \rangle$ 

Fleet size:	1 Dozer(s)
Unit cost:	\$0.248/LCY

Total job time:	70.54 Hours
Total job cost:	\$13,977.64

### **REVEGETATION WORK**

Anders	on Pit	Pern	nit Action:	2013-03-20 Inspection	Permit/Job#:	M2005021
<b>PROJEC</b>	T IDENTIFI	CATION				
Task #:	06A	State:	Colorado		Abbreviation:	None
		County:	Delta		Filename:	M021-06a
Date:	3/22/2013	County.	Dena		i nonanio.	1VIUZ 1-00a

# FERTILIZING

faterials				
Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.33	\$65.40
	To	tal Fertilizer	Materials Cost/Acre	\$65.40

# Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$52.71
	<b>Total Fertilizer Application Cost/Acre</b>	\$52.71

#### **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$243.21

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Fairway	1.50	6.89	\$3.63
Yellow Sweet Clover - Madrid	1.50	8.95	\$3.83
Streambank Wheatgrass - Sodar	3.00	9.78	\$12.63
Thickspike Wheatgrass - Critana	3.00	10.61	\$15.51
Rabbitbrush, Rubber	0.25	3.72	\$9.15
Saltbush, Four Wing	0.25	0.34	\$2.68
Sumac, Skunkbrush	0.25	0.12	\$8.86
Totals Seed Mix	9.75	40.41	\$56.28

Application

Description		Cost /Acre
Drill seeding (DRMS Cost Data)		\$88.20
	<b>Total Seed Application Cost/Acre</b>	\$88.20

# **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.24	\$16.24
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
	Total Mulch Materials Cost/Acre			\$546.24

#### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$65.89
Weed spray, truck, aquatic area, nox. [DMG]	,	\$61.49
	<b>Total Mulch Application Cost/Acre</b>	\$127.38

#### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Tota	ls Nursery Stoc	ck Cost / Acre	\$0.00

#### JOB TIME AND COST

	No. of Acres:	35	Cost /Acre:	\$1,179.42
Estimate	ed Failure Rate:	25%	Cost /Acre*:	\$1,179.42
*Selected Replanti	ng Work Items:	FERTILIZING, TILI MULCHING	LING, SEEDING,	
Initial Job Cost:	\$41,279.70			
Reseeding Job Cost:	\$10,319.93			
Total Job Cost:	\$51,599.63			
Job Hours:	35.00			

#### **REVEGETATION WORK**

Tast	description:	Vegetate wetland	perimeter			
: An	derson Pit	Pern	nit Action: _	2013-03-20 Inspection	Permit/Job#:	M2005021
<u>PRO</u>	JECT IDENTIFI	CATION				
]	usk #: 06B Date: 3/22/2013 User: DMC	State: County:	Colorado Delta		Abbreviation: Filename:	None M021-06b
		ization name: DR	MS			
	Agency of organ	Dice Dice Dice Dice Dice Dice Dice Dice	1110			
<u>FER</u> Mate	TILIZING					
Mate	TILIZING		Unit		Cost / Unit	Cost /Acre
Mate Des	TILIZING rials		Unit	Unit	\$0.33	<b>Cost /Acre</b> \$0.33

# Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$52.71
Total Fertilizer Application Cost/Acre	\$52.71

#### **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$243.21

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	\$22.81
Great Basin Wildrye - Magnar	1.50	6.10	\$11.24
Nebraska Sedge	1.00	20.94	\$137.92
Slender Wheatgrass - Native	3.00	10.95	\$6.75
Red Top	1.00	114.55	\$6.13
Reedgrass, Canadian (or Blue Joint)	0.50	51.42	\$101.55
Reedgrass, Northern - Native	0.50	51.42	\$68.96
Saltgrass, Inland	1.00	13.86	\$46.99
Timothy, Alpine - Native	1.00	29.84	\$27.07
Totals Seed Mix	10.50	338.12	\$429.42

### Application

Description		Cost /Acre
Drill seeding (DRMS Cost Data)		\$88.20
	<b>Total Seed Application Cost/Acre</b>	\$88.20

### MULCHING and MISCELLANEOUS

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$16.24	\$16.24
		Total Mulch	Materials Cost/Acre	\$546.24

### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$65.89
Weed spray, truck, aquatic area, nox. [DMG]		\$61.49
	<b>Total Mulch Application Cost/Acre</b>	\$127.38

#### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Tota	Is Nursery Stoo	ck Cost / Acre	\$0.00

#### JOB TIME AND COST

No. of Acres:		0.72	Cost /Acre:	\$1,487.49
Estimated Failure Rate:		25%	Cost /Acre*:	\$1,487.49
*Selected Replanti	ng Work Items:	FERTILIZING, TILL MULCHING	ING, SEEDING,	
Initial Job Cost:	\$1,070.99			
Reseeding Job Cost:	\$267.75			
Total Job Cost:	\$1,338.74			
Job Hours:	1.00			

EQUIPMENT MOBILIZATION/DEMOBILIZATION						
Task description: Me	bilize reclamatio	on crew an	nd equipn	nent		
Site: Anderson Pit	Permit	Action:	2013-03-	20 Inspection	Permit/Job#:	M2005021
PROJECT IDENTIFICAT	<u>'ION</u>					
Task #:       07A         Date:       3/22/2013         User:       DMC	·	Colorado Delta			Abbreviation: Filename:	None M021-07a
Agency or organization	n name: DRMS	S				
EQUIPMENT TRANSPOL	RT RIG COST					
				-		l per day CRG Data
Truck Tractor Des	cription: GEN	IERIC ON	-HIGHW	AY TRUCK TR 400 HP (2ND H		DIESEL POWERED,
Truck Trailer Des	cription: GEN	ERIC FOI	DING G		ROP DECK EQU	JIPMENT TRAILER
Cost Breakdown:						
<b>Available Rig Capacities</b>	0-25 Tons	26-50	Tons	51+ Tons		
Ownership Cost/Hour:	\$16.63	\$18	3.37	\$22.33		

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

# NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)				fleet		
Cat D8T - 8U	53.70	\$63.00	\$125.45	1	\$188.45	\$125.45	\$250.00
CAT 966H	25.80	\$34.06	\$88.67	1	\$122.73	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: \$439.44 \$302.79 \$750.00

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#### **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. Crew	\$25.51	1	\$25.51	\$25.51
		Subtotals:	\$25.51	\$25.51

## **EQUIPMENT HAUL DISTANCE and Time**

DELTA	
5.00	miles
25.00	mph
\$2,675.77	
\$10.20	
	5.00 25.00 \$2,675.77

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.20	0.20
Return Time (Hours):	0.20	0.20
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.40	0.40

#### JOB TIME AND COST

Total job time: **2.80** Hours

Total job cost: \$2,685.97