

Zuber - DNR, Rob <rob.zuber@state.co.us>

Warren Gravel Pit - Surety Increase

1 message

Zuber - DNR, Rob <rob.zuber@state.co.us> To: Mark Gardner <whiteh2o@acsol.net> Wed, Jul 5, 2023 at 2:56 PM

Hello, Mark -

Please see the attached letter and reclamation cost estimate.

Please do not hesitate to let me know if you have questions.

Rob

Rob Zuber, P.E. Environmental Protection Specialist Active Mines Regulatory Program

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

I am working remotely and can be reached by cell at 720.601.2276.

Physical Address: 1313 Sherman Street, Room 215 Denver, CO 80203 Mailing Address: Division of Reclamation, Mining and Safety, Room 215 1001 East 62nd Avenue Denver, CO 80216 rob.zuber@state.co.us | http://drms.colorado.gov

M2012024_SI1_Division_Letter_07052023_with_RCE.pdf
815K



July 5, 2023

Mark Gardner Whitewater Building Materials Corporation 940 South 10th Street Grand Junction, CO 81501

Re: Warren Gravel Pit - File No. M-2012-024 Increase of Required Surety after Inspection of Site (SI-01)

Dear Mr. Gardner:

On July 5, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$37,429.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$8,694.16. Please see the enclosed pages with details of the Division's estimate.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter (July 5, 2023).

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567 (8148), or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit after September 3, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$28,734.84
Prior Liability:	\$28,734.84
Change in Liability:	\$8,694.16
Revised Liability:	\$37,429.00
Prior Permit Acreage:	40.44
Change in Permit Acreage:	0.00
Revised Permit Acreage:	40.44
Prior Affected Acreage:	0.00
Change in Affected Acreage:	0.00
Revised Affected Acreage:	0.00

Physical Address: 1313 Sherman Street, Room 215, Denver, CO 80203 P 303.866.3567 F 303.832.8106 Mailing Address: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216 <u>https://drms.colorado.gov</u> Jared S. Polis, <u>Governor |</u> Dan Gibbs, Executive Director | Virginia Brannon, Director



If you have any questions, please contact me by telephone at (720) 601-2276, or by email at Rob.zuber@state.co.us.

Sincerely,

Phot D. Zh

Robert D. Zuber, P.E. Environmental Protection Specialist

Enclosure

COST SUMMARY WORK

Т	ask descrip	otion:	Cost Summary					
Site:	Warren	Gravel Pit	Pe	rmit Action:	2023 Update	Permit/Jol	o#: <u>M2012024</u>	
<u>PI</u>		IDENTIFIC	<u>CATION</u>					
	Task #:		State:	Colorado		Abbreviation:	None	
	Date:	6/27/2023	County:	Delta		Filename:	M024-000	
	User:	RDZ						
	Age	ency or organi	zation name:	RMS				

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
1 ubit	Description	Used	Size	Hours	Cost
01a	Reduce 1,600 ft highwall with dozer	DOZER	1	21.16	\$6,961
02a	Distribute topsoil around pit proir to spreading	LOADER	1	27.29	\$3,192
	with Dozer				
03a	Spread 4926 CY of topsoil placed by loader	DOZER	1	2.75	\$904
04a	Revegetation of 8.64 acres	REVEGE	1	16.00	\$14,502
05a	Mobilization	MOBILIZE	1	2.30	\$3,237
		<u>SUBTC</u>	DTALS:	69.5	\$28,796

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$582
Performance bond:	1.05	Total =	\$302
Job superintendent:	34.75	Total =	\$2,611
Profit:	10.00	Total =	\$2,880
		TOTAL O & P =	\$6,374
		CONTRACT AMOUNT (direct + O & P) = $($	\$35,170

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 0.00 5.00	Total = Total =	\$500 \$0 \$1,759
CONTINGENCY:	0.00	Total =	\$0
	TOTAL I	NDIRECT COST =	\$8,633
TOTAL BO	ND AMOUNT (d	lirect + indirect) =	\$37,429

BULLDOZER WORK

Task description:	Reduce 1,600 ft l		1 40201		
Warren Gravel Pit	Per	mit Action:	2023 Update	Permit/Job#:	M2012024
PROJECT IDENTIF	FICATION				
Task #: 01A	State:	Colorado		Abbreviation:	None
Date: $6/27/2023$		Delta		Filename:	M024-01a
User: RDZ				-	
	anization name: DF	RMS			
Agency of orga					
HOURLY EQUIPMI	<u>ENT COST</u>				
	at D9T - 9SU				
Horsepower: 40					
	emi-Universal				
Attachment: NA					
	per day				
Data Source: (C	(RG)				
Cost Breakdown:					
		¢146.00	<u>Utilization %</u>		
Ownership Cost/Hour:		\$146.30	NA		
Operating Cost/Hour:		\$141.41	100 NA		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
		\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OUAN	\$329.01 \$329.01	φ Π.ου			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>16,6</u> Swell factor: <u>1.12</u>	\$329.01 \$329.01 TITIES 652 24				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>16,6</u> Swell factor: <u>1.12</u>	\$329.01 \$ 329.01 TITIES 652				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 16,6 Swell factor: 1.12 Loose volume: 18,7 Source of estimated volu	\$329.01 \$329.01 TITIES 652 24 710 LCY Ime: Division	 of Reclamati	on, Mining & Safety		
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Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 16,6 Swell factor: 1.12 Loose volume: 18,7 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consist Dozing me	$\begin{array}{r c c c c c c c c c c c c c c c c c c c$		on, Mining & Safety 		

Job efficiency	: 0.830	(1 SHIFT/DAY)
Spoil pile	: 0.800	(FND-RF)
Push gradient	: 1.329	(CAT HB)
Altitude	: 1.000	(CAT HB)
Material Weight	: 0.793	(CAT HB)
Blade type	: 1.000	(PAT)
Net correction	:0.4724	
Adjusted unit production:	884.33 LCY/hr	
Adjusted fleet production:	884.33 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.372/LCY

Total job time:	21.16 Hours
Total job cost:	\$6,961

WHEEL LOADER - LOAD AND CARRY WORK

Warren Gravel Pit	Permit Action:	2023 Update	Pe	rmit/Job#:	M2012024
	TION				
PROJECT IDENTIFICA					
Task #: 02A	State: Colorado		-	eviation:	None
Date: 6/27/2023	County: Delta		_ F	ilename:	M024-02a
User: RDZ					
Agency or organizat	tion name: DRMS				
HOURLY EQUIPMENT	<u>COST</u>				
Basic Machine: CA	Т 962Н	Ho	rsepower:		209
	PS Cab		nift Basis:		er day
		Dat	a Source:	-	CRG)
Cost Breakdown:					
		Utilization %			
Ownership Cost/Hour	r: \$40.53	NA			
Operating Cost/Hour		100			
Operator Cost/Hour		NA			
Total Unit Cost/Hour	r: \$116.94				
Total Elast Cost/IL					
Total Fleet Cost/Hou	r: \$116.94				
i otai Fieet Cost/Hou	ır: <u>\$116.94</u>				
MATERIAL QUANTITI	ES	Swell factor:	1.000		
Initial volume: <u>4,926</u> Loose volume:	ES	Swell factor:	1.000		
MATERIAL QUANTITI Initial volume:4,926 Loose volume:	ES CCY 4,926 LCY				
MATERIAL QUANTITI Initial volume: 4,926 Loose volume: Source of est	ES CCY 4,926 LCY timated volume: Division	of Reclamation, Mini			
MATERIAL QUANTITI Initial volume:4,926 Loose volume:	ES CCY 4,926 LCY timated volume: Division	of Reclamation, Mini			
MATERIAL QUANTITI	ES CCY 4,926 LCY timated volume: Division ted swell factor: Cat Han	of Reclamation, Mini			
MATERIAL QUANTITI Initial volume:4,926 Loose volume: Source of estima HOURLY PRODUCTIO	ES 4,926 CCY LCY timated volume: ted swell factor: Cat Han <u>N</u>	of Reclamation, Mini dbook	ng & Safety		minutos
MATERIAL QUANTITI Initial volume: 4,926 Loose volume: Source of ess Source of estima HOURLY PRODUCTIO Loader Cycle Time: U	ES CCY 4,926 LCY timated volume: Division ted swell factor: Cat Han	of Reclamation, Mini dbook	ng & Safety er):	0.500	minutes
MATERIAL QUANTITI Initial volume:4,926 Loose volume: Source of estima HOURLY PRODUCTIO Loader Cycle Time: U Cycle Time Factors	ES CCY 4,926 LCY timated volume: Division tted swell factor: Cat Han N Nadjusted Basic Cycle Time	of Reclamation, Mini dbook e (load, dump, maneuve	ng & Safety er): Factor	0.500 (min.)	Source
MATERIAL QUANTITI Initial volume: 4,926 Loose volume: Source of estima BOURLY PRODUCTIO Loader Cycle Time: U Cycle Time Factors Material:	ES CCY 4,926 LCY timated volume: Division tted swell factor: Cat Han N Nadjusted Basic Cycle Time Material 1/8" to 3/4" diameter	of Reclamation, Mini dbook e (load, dump, maneuve eter -0.02	ng & Safety er): Factor -0.(0.500 (min.))20	Source (Cat HB)
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MATERIAL QUANTITI Initial volume: 4,926 Loose volume: Source of est Source of estima HOURLY PRODUCTIO Loader Cycle Time: U Cycle Time Factors Material: Stockpile: Truck Ownership:	ES 4,926 CCY LCY timated volume: Division ted swell factor: Cat Han N Inadjusted Basic Cycle Time Material 1/8" to 3/4" diam Conveyor or dozer piled 10 No adjustment - factor not	of Reclamation, Mini dbook e (load, dump, maneuvo eter -0.02) ft. high or less 0.01	ng & Safety er): Factor -0.0 0.0 0.0	0.500 (min.))20 10 00	Source (Cat HB) (Cat HB) (Cat HB)
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MATERIAL QUANTITI Initial volume: 4,926 Loose volume: Source of estima BOURLY PRODUCTIO Loader Cycle Time: U Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	ES CCY 4,926 LCY timated volume: Division ted swell factor: Cat Han N Unadjusted Basic Cycle Time Material 1/8" to 3/4" diam Conveyor or dozer piled 10 No adjustment - factor not Constant operation -0.04 Nominal target 0.00 Net Cy Adjus	e of Reclamation, Mini dbook e (load, dump, maneuve eter -0.02 oft. high or less 0.01 applicable 0.00	ng & Safety er): Factor -0.0 0.0 0.0 -0.0 0.0	0.500 (min.))20 10 00)40 00)50	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
MATERIAL QUANTITI Initial volume:	ES 4,926 CCY LCY timated volume: Division ted swell factor: Cat Han N Inadjusted Basic Cycle Time Material 1/8" to 3/4" diam Conveyor or dozer piled 10 No adjustment - factor not Constant operation -0.04 Nominal target 0.00 Net Cy Adjus Data to the test of	e (load, dump, maneuvo e (load, dump, maneuvo eter -0.02 D ft. high or less 0.01 applicable 0.00 vcle Time Adjustment: ted Basic Cycle Time:	ng & Safety er): Factor -0.0 0.0 0.0 -0.0 0.0 -0.0 0.4	0.500 (min.))20 10 00)40 00)50	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
MATERIAL QUANTITI Initial volume:	ES CCY 4,926 LCY timated volume: Division ted swell factor: Cat Han N Unadjusted Basic Cycle Time Material 1/8" to 3/4" diam Conveyor or dozer piled 10 No adjustment - factor not Constant operation -0.04 Nominal target 0.00 Net Cy Adjus	e (load, dump, maneuvo e (load, dump, maneuvo eter -0.02 0 ft. high or less 0.01 applicable 0.00 vcle Time Adjustment: ted Basic Cycle Time: e, no water, 2" tire pen	ng & Safety er): Factor -0.0 0.0 0.0 -0.0 0.0 -0.0 0.4 etration 5.0	0.500 (min.) 220 10 00 240 00 250 50	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes

U	Grade Res.	Rolling	Total Res.	Travel Time	Source
(feet)	(%)	Res. (%)	(%)	(minutes)	Source
400	0.00	5.00	5.00	0.3671	(Cat HB)
400	0.00	8.00	8.00	0.4288	(Cat HB)
_	400	400 0.00	400 0.00 5.00	400 0.00 5.00 5.00	400 0.00 5.00 5.00 0.3671

		-	otal Travel Time Total Cycle Time		minutes minutes
Load Bucket Capacity					
Rated Capacity:	4.30	LCY (heaped))		
Bucket Fill Factor:	1.050	Moist loam or	sandy clay (100	% - 110%) 1.050	
Adjusted Capacity:	4.52	LCY			
Job Condition Correction F Site Altitude: <u>4970</u> feet	actors	c.			
		Source			
Altitude Adj:	1.00	(CAT HB)			
Job Efficiency:	0.83	(1 shift/day)			
Net Correction:	0.83	multiplier	-		
Unadj	usted Hourly Unit	Production:	217.43	LCY/Hour	
1.4	usted Hourly Unit	Droduction	190 /7	CV/Hour	

enaujustea mourry ennerroadetion.	217.10	LC I/IIOui
Adjusted Hourly Unit Production:	180.47	LCY/Hour
Adjusted Hourly Fleet Production:	180.47	LCY/Hour

Fleet size:	1	Loader(s)	Total job time:	27.30	Hours
Unit cost:	\$0.648	/LCY	Total job cost:	\$3,192	

BULLDOZER WORK

Fask description:	Spread 4926 CY of topsoil	placed by loadel		
Warren Gravel Pit	Permit Action:	2023 Update	Permit/Job#:	M2012024
PROJECT IDENTIFI	ICATION			
Task #: 03A	State: Colorado)	Abbreviation:	None
Date: 6/27/2023	County: Delta		Filename:	M024-03a
User: RDZ	•		-	
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	ENT COST			
	D9T - 9SU			
Horsepower: 405				
	ni-Universal			
Attachment: NA				
	er day			
Data Source: (CR	(G)			
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$146.30	NA		
Operating Cost/Hour:	\$141.41	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Onenaten Ceet/Herry	\$41.30	NA		
Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT	\$329.01 \$329.01			
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000	\$329.01 \$329.01 ITIES 6 0			
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000	\$329.01 \$329.01 ITIES 6			
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000	\$329.01 \$329.01 ITIES 6 0 6 LCY ne:Division of Reclama	tion, Mining & Safety		
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000 Loose volume: 4,920 Source of estimated volum	\$329.01 \$329.01 ITIES 6 0 6 LCY ne: Division of Reclama factor: Cat Handbook			
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000 Loose volume: 4,920 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$329.01 \$329.01 ITIES 6 0 6 LCY ne: Division of Reclama factor: Cat Handbook CION 60 feet			
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000 Loose volume: 4,920 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Jnadjusted hourly product	\$329.01 \$329.01 ITIES 6 0 6 LCY ne: Division of Reclama factor: Cat Handbook CION 60 feet ction: 1,872.0 LCY/hr	tion, Mining & Safety		
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000 Loose volume: 4,920 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$329.01 \$329.01 ITIES 6 0 6 LCY ne: Division of Reclama factor: Cat Handbook CION 60 feet ction: 1,872.0 LCY/hr	tion, Mining & Safety		
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,920 Swell factor: 1.000 Loose volume: 4,920 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Jnadjusted hourly product	\$329.01 \$329.01 ITIES 6 0 6 LCY ne: Division of Reclama factor: Cat Handbook CION 60 feet ction: 1,872.0 LCY/hr	tion, Mining & Safety		
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ey: 0.830	(1 SHIFT/DAY)
le: 0.800	(FND-RF)
nt: 1.115	(CAT HB)
le: 1.000	(CAT HB)
ht: 1.438	(CAT HB)
be: 1.000	(PAT)
on: 0.9582	
1,793.75 LCY/hr	
1793.75 LCY/hr	
	le: 0.800 nt: 1.115 le: 1.000 nt: 1.438 pe: 1.000 on: 0.9582 1,793.75 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.183/LCY

Total job time:	2.75 Hours
Total job cost:	\$904

REVEGETATION WORK

Task descri	ption:	Revegetation of 8.	64 acres			
ite: Warren	Gravel Pit	Perm	it Action:	2023 Update	Permit/Job	#: <u>M2012024</u>
PROJECT Task #:	IDENTIFIC		Colorado		Abbreviation:	None
Date: User:	6/27/2023 RDZ		Delta		Filename:	M024-04a

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
1248	100.00	pound	\$0.47	\$47.00
			Total Fertilizer Materials Cost/Acre	\$47.00

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Subsoiling, heavy, 18" depth {DMG}	\$213.22
Total Tilling Cost/Acre	\$213.22

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Fairway	1.50	6.89	\$6.04
Yellow Sweet Clover - Madrid	1.50	8.95	\$4.24
Streambank Wheatgrass - Sodar	3.00	9.78	\$17.10
Thickspike Wheatgrass - Critana	3.00	10.61	\$20.63
Rabbitbrush, Rubber	0.25	3.72	\$16.07
Saltbush, Four Wing	0.25	0.34	\$3.13
Sumac, Skunkbrush	0.25	0.12	\$5.25
Totals Seed Mix	9.75	40.41	\$72.45

Application

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

MULCHING and MISCELLANEOUS

Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$3.04	\$3.04
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$421.36	\$421.36
Total Mulch Materials Cost/Acre				\$424.40

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
	Total Mulch Application Cost/Acre	\$214.57

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 2	Nursery Stoc	k Cost / Acre	\$0.00

	No. of Acres:	8.64	Cost /Acre:	\$1,243.28	
Estimate	ed Failure Rate:	35%	Cost /Acre*:	\$1,243.28	
*Selected Replanti	ng Work Items:	FERTILIZING,TII	LLING,SEEDING,MU		
		LCHING			
Initial Job Cost:	\$10,741.94				
Reseeding Job Cost:	\$3,759.68				
Total Job Cost:	\$14,502				
Job Hours:	16.00				

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	bilization					
: Warren Grave	el Pit	Permit	Action: _2023	Update]	Permit/Job#: <u>M</u>	2012024
PROJECT IDE	NTIFICATI	ON					
Task #: 05A	A	State: Co	olorado		Abbre	eviation: None	
Date: 6/2 User: RD	7/2023 Z	County: De	elta		Fi	lename: M024	-05a
Agency	or organization	n name: DRMS					
EQUIPMENT 1	RANSPOR	<u>T RIG COST</u>					
					Shift ba		
				C	lost Data Sour	rce: CRG Da	ta
Truck	Tractor Desc	ription: GENE	RIC ON-HIGH	WAY TRU	CK TRACTO	DR, 6X4, DIESEL	POWERED.
					(2ND HALF,		,
Truc	k Trailer Desc	ription: G	ENERIC FOLD			ROP DECK EQU	IPMENT
			,	TRAILER (25T, 50T, AN	ND 100T)	
Cost Breakdown:							
Available Rig C		0-25 Tons	26-50 Tons		Tons		
	Cost/Hour:	\$15.25	\$23.06	\$3	7.58		
	Cost/Hour:	\$25.26	\$30.83	\$5	1.41		
Operator	Cost/Hour:	\$27.71	\$27.71	\$2	7.71		
Helper	Cost/Hour:	\$0.00	\$20.22	\$2	0.22		
Total Unit	Cost/Hour:	\$68.22	\$101.82	\$13	36.92		
NON ROADAB	-						
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 D9T - 9SU	60.01	\$146.30	\$136.92	1	\$283.22	\$136.92	\$250.00
CAT 962H	20.95	\$40.53	\$68.22	1	\$108.75	\$68.22	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$14.23	2	\$28.46	\$28.46
	\$28.46	\$28.46		

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	DELTA	
Total one-way travel distance:	3.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *	\$3,232.55	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$4.27	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.08	0.08
Return Time (Hours):	0.08	0.08
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.15	0.15

JOB TIME AND COST

Total job time: 2.30 Hours

Total job cost: \$3,237