# **COST SUMMARY WORK**

Task descri	ption:	<b>Bond Estimate</b>	to include Sta	age 3		
e: William	s/Illinois Grav	el Pit Pe	ermit Action:	2019 Bond Estimate	Permit/Jol	o#: M1997039
<u>PROJECT</u>	DENTIFIC	<u>'ATION</u>				
Task #:	000	State:	Colorado		Abbreviation:	None
Date:	8/28/2019	County:	Jackson	_	Filename:	M039-000
User:	PSH					

# TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Final Grading - Stage 1 - East Boundary Only	DOZER	1	19.60	\$4,826
002	Replace 8" Topsoil - 14.98 Acres - 110c & Stage 1	DOZER	1	21.11	\$5,197
003	Revegetate 14.98 Acres - 110c & Stage 1	REVEGE	1	80.00	\$19,914
004	Fence 5 Acres in Reclamation	SITEMAINT ENANCE	1	0.00	\$500
005	Mob/Demob	MOBILIZE	1	4.26	\$1,462
006	Replace 8" Topsoil - 5.72 Acres - Stage 2	DOZER	1	8.06	\$1,984
007	Revegetate 5.72 Acres - Stage 2	REVEGE	1	80.00	\$7,604
008	Replace 8" Topsoil - 5.72 Acres - Stage 3	DOZER	1	8.06	\$1,984
009	Revegetate 5.72 Acres - Stage 3	REVEGE	1	80.00	\$7,604
		TALS:	301.09	\$51,075	

# **INDIRECT COSTS**

### **OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$1,032
Performance bond:	1.05	Total =	\$536
Job superintendent:	150.55	Total =	\$10,446
Profit:	10.00	Total =	\$5,108

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	4.25	Total =	\$2,898
Reclamation management and/or administration:	5.00	_	\$3,410

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$23,430

TOTAL BOND AMOUNT (direct + indirect) = \_\_\$74,500.00 (Rounded)\_\_

Task description:	Final Gra	ading - Stage 1 - Eas	st Boundary Only		
: Williams/Illinois	Gravel Pit	Permit Action:	2019 Bond Estimate	Permit/Job#:	M1997039
PROJECT IDEN	<b>TIFICATION</b>				
Task #: 001		State: Colorado		Abbreviation:	None
Date: 8/28/2	019 C	County: Jackson		Filename:	M039-001
User: PSH		· -		<del>-</del>	
Agency or	organization nam	e: DRMS			
HOURLY EQUI	PMENT COST				
Basic Machine:	Cat D8T - 8SU		_		
Horsepower: Blade Type:	310 Semi-Universal		<u> </u>		
Attachment:	3-shank ripper		<u> </u>		
Shift Basis:	1 per day		_		
Data Source:	(CRG)		<u> </u>		
Cost Breakdown:					
COST DIEAKUOWII.			<u>Utilization %</u>		
Ownership Cost/He	our:	\$103.86	NA		
Operating Cost/He		\$82.26	100		
Ripper own. Cost/He	our:	\$10.43	NA		
Ripper op. Cost/He		\$8.38	100		
Operator Cost/He	our:	\$41.24	NA		
MATERIAL QUA	8,167 1.000				
Loose volume:	<b>8,167</b> LCY				
Source of estimated Source of estimated		Division of Reclamati Cat Handbook	on, Mining & Safety		
HOURLY PROD	<u>UCTION</u>				
Average push distan Unadjusted hourly p		feet 2 LCY/hr			
Materials consistence	y description:	Consolidated stockp	pile 1.0		
Average push gradie Average site altitude					
Material weight:	2,900 lbs/l	LCY			
Weight description:	Sand and §	gravel - Dry			
Job Condition Corre			Source		
	ator Skill:	0.750	(AVG.)		
Material co		1.000	(CAT HB)		
	g method:	1.000	(GEN.)		
	Visibility:	1.000	(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 416.61 LCY/hr
Adjusted fleet production: 416.61 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.591/LCY

Total job time: 19.60 Hours
Total job cost: \$4,826

Williams/Illinoi	s Gravel Pit	Permit Action:	2019 Bond Estimate	Permit/Job#:	M1997039
	S Graver I it		201) Bond Estimate		W11777037
PROJECT IDE	NTIFICATIO	<u>N</u>			
Task #: 002		State: Colorado		Abbreviation:	None
Date: 8/28/	/2019	County: Jackson		Filename:	M039-002
User: PSH			_	_	
Agency o	r organization na	me: DRMS			
HOURLY EQU	IPMENT COS	<u>ST</u>			
Basic Machine:	Cat D8T - 8S	U			
Horsepower:	310	<u>-</u>			
Blade Type:	Semi-Univers	sal	<del></del>		
Attachment:	3-shank rippe	r	<del></del>		
Shift Basis:	1 per day		<del></del>		
Data Source:	(CRG)		<del></del> :		
Cost Breakdown:					
Cost Breakdown.			<u>Utilization %</u>		
Ownership Cost/I		\$103.86	NA		
Operating Cost/I		\$82.26	100		
Ripper own. Cost/I		\$10.43	NA		
Ripper op. Cost/l		\$8.38	100		
Operator Cost/l	Hour:	\$41.24	NA		
Total unit Cost/Ho	ur: \$246.17				
Total fleet Cost/Ho					
Total Fleet Cost/II	σαι. φ <b>240.1</b> 7				
MATERIAL QU	IANTITIES				
	<u> </u>				
Initial Volume:	15,950				
Swell factor:	1.000				
Swell factor:	1.000 <b>15,950</b> LCY	Division of Reclama	tion, Mining & Safety		
Swell factor: Loose volume:	1.000 <b>15,950</b> LCY d volume:	Division of Reclama Cat Handbook	tion, Mining & Safety		
Swell factor: Loose volume: Source of estimate	1.000 <b>15,950</b> LCY d volume:		tion, Mining & Safety		
Swell factor: Loose volume: Source of estimate	1.000 15,950 LCY d volume: d swell factor:		tion, Mining & Safety		
Swell factor: Loose volume: Source of estimate Source of estimate	1.000 15,950 LCY d volume: d swell factor:		tion, Mining & Safety		
Swell factor: Loose volume: Source of estimates Source of estimates HOURLY PRO	1.000 15,950 LCY d volume: d swell factor:  DUCTION unce: 8	Cat Handbook	tion, Mining & Safety		
Swell factor: Loose volume: Source of estimates Source of estimates HOURLY PRO Average push dista	1.000 15,950 LCY d volume: d swell factor:  DUCTION  nnce:	Cat Handbook  0 feet			
Swell factor: Loose volume: Source of estimates Source of estimates HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad	1.000 15,950 LCY d volume: d swell factor:  DUCTION unce: production:  8 9  acy description: ient: -10 %	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stock			
Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud	1.000 15,950 LCY  d volume: d swell factor:  DUCTION  nnce: production:  2  ncy description: ient: de:  -10 % 8,450 fe	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stocket			
Swell factor: Loose volume: Source of estimates Source of estimates HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad	1.000 15,950 LCY d volume: d swell factor:  DUCTION unce: production:  8 9  acy description: ient: -10 %	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stocket			
Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud	1.000 15,950 LCY d volume: d swell factor:  DUCTION  nnce: production:  9  ncy description: ient: -10 % -8,450 fe -1,600 lb	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stocket			
Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud Material weight: Weight description Job Condition Cort	1.000 15,950 LCY d volume: d swell factor:  DUCTION  nnce: production:  9 ncy description: ient: -10 % -8,450 fe -1,600 lb : Top Soi	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stocket			
Swell factor: Loose volume: Source of estimate. Source of estimate. HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud Material weight: Weight description Job Condition Corr	1.000	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stock eet  os/LCY  1  0.750	epile 1.0  Source (AVG.)		
Swell factor: Loose volume: Source of estimate. Source of estimate. HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud Material weight: Weight description Job Condition Com Op Material of	1.000	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stock  eet  0s/LCY  1  0.750 1.000	Source (AVG.) (CAT HB)		
Swell factor: Loose volume: Source of estimate. Source of estimate. HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitud Material weight: Weight description Job Condition Com Op Material of	1.000	Cat Handbook  0 feet 84.2 LCY/hr  Consolidated stock eet  os/LCY  1  0.750	epile 1.0  Source (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 755.47 LCY/hr
Adjusted fleet production: 755.47 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.326/LCY

Total job cost: 21.11 Hours
Total job cost: \$5,197

# **REVEGETATION WORK**

Task description: Revegetate			e 14.98 Acres - 110c & Stage 1				
Site:	Williams/Illinois Grave	el Pit	Permit Action:	2019 Bond Estimate	Permit/Job#: _	M1997039	
<u>P</u>	ROJECT IDENTIFIC	<b>ATION</b>					

Task #:	003	State:	Colorado	Abbreviation:	None
Date:	8/28/2019	County:	Jackson	Filename:	M039-003

User: PSH

Agency or organization name: DRMS

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

**Application** 

PPICONIC		
Description		Cost /Acre
		\$
	Total Fertilizer Application Cost/Acre	\$0.00

# **TILLING**

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$101.93
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	<b>Total Tilling Cost/Acre</b>	\$295.53

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63
Mountain Brome - Bromar	10.00	16.07	\$38.00
Bottlebrush Squirreltail	2.50	11.02	\$40.56
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00
Rocky Mountain Fescue	5.00	80.35	\$36.25
Slender Wheatgrass - Native	10.00	36.50	\$46.25
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38
Prairie Junegrass	2.50	132.89	\$65.00

	<b>Totals Seed Mix</b>	50.00	433.28	\$389.56
Annlication				

**Application** 

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application	Cost/Acre \$267.22

# **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

**Application** 

Description		Cost /Acre
Weed spray, hand, non-aquatic area, nox. [DMG]		\$180.00
	<b>Total Mulch Application Cost/Acre</b>	\$180.00

### **NURSERY STOCK PLANTING**

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

### **JOB TIME AND COST**

 No. of Acres:
 14.98
 Cost /Acre:
 \$1,132.31

 Estimated Failure Rate:
 30%
 Cost /Acre\*:
 \$656.78

\*Selected Replanting Work Items: SEEDING

Initial Job Cost: \$16,962.00

Reseeding Job Cost: \$2,951.57

Total Job Cost: \$19,914

80.00

# **SITE MAINTENANCE**

Site:	Williams/Illinois Gravel	Pit	Permit Action:	2019 Bond Estimate	Permit/.	Job#: <u>M1997039</u>
OJEC	CT IDENTIFICATION					
Task #:	004	State:	Colorado		Abbreviation:	None
Date:	8/28/2019	County:	Jackson		Filename:	M039-004
User:	PSH	•				

# **UNIT COSTS**

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	<b>Total Cost</b>	
Electric Fence - 5 Acres @ \$100/Acre	0.00	USER PROVIDED ITEM	5.00		\$100.00	\$500.00	

 Job Hours:
 0.00
 Total Cost:
 \$500.00

### EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mob/Demob

Site: Williams/Illinois Gravel Pit Permit Action: 2019 Bond Estimate Permit/Job#: M1997039

#### **PROJECT IDENTIFICATION**

Task #:005State:ColoradoAbbreviation:NoneDate:8/28/2019County:JacksonFilename:M039-005

User: PSH

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 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
	(TONS)		t		fleet		
Cat D8T - 8SU	53.08	\$114.29	\$141.54	1	\$255.83	\$141.54	\$250.00

Subtotals: \$255.83 \$141.54 \$250.00

#### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/	Fleet Size	Haul Trip	Return Trip
	unit		Cost/hr/ fleet	Cost/hr/ fleet

Subtotals: **\$0.00 \$0.00** 

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: WALDEN

Total one-way travel distance: 17.00 miles

Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost \*
 '\* two round trips with haul rig:
 Total Roadable Mob/Demob Cost \*\*
 \*\* one round trip, no haul rig:

\$0.00

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

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.57	0.57
Return Time (Hours):	0.57	0.57
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.13	1.13

### **JOB TIME AND COST**

Total job cost: 4.27 Hours

Total job cost: \$1,462

: Williams/Il	linois Gra	avel Pit	Per	mit Action:	2019 Bond Estimate	Permit/Job#:	M1997039
PROJECT I	DENTIF	TICATIO	N				
	006		State:	Colorado		Abbreviation:	None
	8/28/2019		County:	Jackson		Filename:	M039-006
	PSH		country.	- Cucinson		-	1.100
_		• ,•	. DI	DMC			
Ager	cy or orga	anization na	ime: Di	RMS			
<b>HOURLY E</b>	QUIPM	ENT COS	<u>ST</u>				
Basic Mach	ine: Ca	at D8T - 8S	U				
Horsepo	wer: 31	0			<del></del>		
Blade T		mi-Univer	sal		_		
Attachm	ient: 3-	shank rippe	er		<del></del>		
Shift Ba		per day					
Data Sou		RG)			<del></del>		
Cost Breakdov	wn:				<del></del>		
Cost Breakdov	<u> </u>				<u>Utilization %</u>		
Ownership C	ost/Hour:			\$103.86	NA		
Operating C		-		\$82.26	100		
Ripper own. C		-		\$10.43	NA		
Ripper op. C		-		\$8.38	100		
Operator C				\$41.24	NA		
-				ψ11.20 Γ	IVA		
Total unit Cos		\$246.17					
Total Fleet Co	st/Hour:	\$246.17	1				
<b>MATERIAI</b>	<u> QUAN'</u>	<u> FITIES</u>					
Initial Volur	ne: 6,09	90					
Swell fact							
Loose volur		90 LCY					
	nated volv	-					
Source of estin	HAIGH VOIL	ıme:	Division	of Reclamati	on Mining & Safety		
Source of estin		· · · · · · · · · · · · · · · · · · ·			on, Mining & Safety		
Source of estin		· · · · · · · · · · · · · · · · · · ·	Division Cat Hand		on, Mining & Safety		
Source of estir	nated swe	ll factor:			on, Mining & Safety		
Source of estir	nated swe	ll factor:	Cat Hand		on, Mining & Safety		
HOURLY P Average push	RODUC distance:	ll factor:	Cat Hanc	lbook	on, Mining & Safety		
Source of estir	RODUC distance:	ll factor:	Cat Hand	lbook	on, Mining & Safety		
HOURLY P Average push	RODUC distance: ourly produ	TION  action: $\frac{8}{9}$	Cat Hand 60 feet 184.2 LCY	lbook			
HOURLY P Average push Unadjusted ho Materials cons	RODUC distance: ourly produ	Il factor: $\frac{8}{2}$ ITION  Luction: $\frac{8}{9}$ Escription:	Cat Hand 60 feet 184.2 LCY	/hr			
HOURLY P Average push Unadjusted ho Materials cons Average push	RODUC distance: aurly produ sistency de gradient:	Ill factor: $\frac{8}{2}$ It is a second of the	Cat Hand 0 feet 184.2 LCY Consol	/hr			
HOURLY P Average push Unadjusted ho Materials cons	RODUC distance: aurly produ sistency de gradient:	Il factor: $\frac{8}{2}$ ITION  Luction: $\frac{8}{9}$ Escription:	Cat Hand 0 feet 184.2 LCY Consol	/hr			
HOURLY P Average push Unadjusted ho Materials cons Average push	RODUC distance: ourly produ sistency de gradient: ltitude:	Ill factor: $\frac{8}{2}$ It is a second of the	Cat Hand 0 feet 84.2 LCY  Consol	/hr			
HOURLY P Average push Unadjusted ho Materials cons Average push Average site a	RODUC distance: ourly productistency designation: lititude: ht:	Ill factor: $\frac{8}{2}$ In the second section: $\frac{8}{2}$ Exerciption: $\frac{-10 \%}{8,450 \text{ fg}}$	Cat Hand 0 feet 84.2 LCY Consoluted eet	/hr			
HOURLY P Average push Unadjusted ho Materials cons Average push Average site a Material weigh Weight descrip	mated swe RODUC distance: ourly produ sistency de gradient: ltitude: ht: ption:	Ill factor: $ \frac{8}{2710N} $ Lection: $ \frac{8}{9} $ Exerciption: $ \frac{-10 \%}{8,450 \text{ fo}} $ $ \frac{1,600 \text{ lb}}{2000} $	Cat Hand 0 feet 84.2 LCY Consoluted eet	/hr	pile 1.0		
HOURLY P Average push Unadjusted ho Materials cons Average push Average site a Material weigh	RODUC distance: ourly produ sistency de gradient: ltitude: ht: ption: Correction	TION	Cat Hand 0 feet 84.2 LCY Consol eet	/hr idated stocky	pile 1.0		
HOURLY P Average push Unadjusted ho Materials cons Average push Average site a Material weigh Weight descrip Job Condition	mated swe RODUC distance: ourly produ sistency de gradient: ltitude: ht: ption:	TION   8	Cat Hand 0 feet 84.2 LCY Consoluted eet 0 s/LCY	/hr	pile 1.0		

(AVG.)

Visibility: 1.000

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 755.47 LCY/hr
Adjusted fleet production: 755.47 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.326/LCY

Total job time:
Total job cost:

8.06 Hours
\$1,984

# **REVEGETATION WORK**

Task description: Revegetate 5.72 Acres - Stage 2

Site: Williams/Illinois Gravel Pit Permit Action: 2019 Bond Estimate Permit/Job#: M1997039

PROJECT IDENTIFICATION

Task #:007State:ColoradoAbbreviation:NoneDate:8/28/2019County:JacksonFilename:M039-007

User: PSH

Agency or organization name: DRMS

### **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

**Application** 

F		
Description		Cost /Acre
		\$
		Ψ
	<b>Total Fertilizer Application Cost/Acre</b>	\$0.00

# **TILLING**

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$101.93
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	<b>Total Tilling Cost/Acre</b>	\$295.53

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63
Mountain Brome - Bromar	10.00	16.07	\$38.00
Bottlebrush Squirreltail	2.50	11.02	\$40.56
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00
Rocky Mountain Fescue	5.00	80.35	\$36.25
Slender Wheatgrass - Native	10.00	36.50	\$46.25
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38
Prairie Junegrass	2.50	132.89	\$65.00

	Totals Seed Mix	50.00	433.28	\$389.56
Application				

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

# **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

**Application** 

Description		Cost /Acre
Weed spray, hand, non-aquatic area, nox. [DMG]		\$180.00
	<b>Total Mulch Application Cost/Acre</b>	\$180.00

### **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: 5.72 Cost /Acre: \$1,132.31 Estimated Failure Rate: 30% Cost /Acre\*: \$656.78

\*Selected Replanting Work Items: <u>SEEDING</u>

Initial Job Cost: **\$6,476.81** Reseeding Job Cost: \$1,127.03

Total Job Cost: \$7,604 Job Hours: **80.00** 

# **REVEGETATION WORK**

Revegetate 5.72 Acres - Stage 3

Site:	Williams/Illinois Gravel Pit	Permit Action:	2019 Bond Estimate	Permit/Job#:	M1997039	

# **PROJECT IDENTIFICATION**

Task #:009State:ColoradoAbbreviation:NoneDate:8/28/2019County:JacksonFilename:M039-009

User: PSH

Agency or organization name: DRMS

# **FERTILIZING**

Task description:

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

**Application** 

F		
Description		Cost /Acre
		\$
		Ψ
	<b>Total Fertilizer Application Cost/Acre</b>	\$0.00

# **TILLING**

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$101.93
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	Total Tilling Cost/Acre	\$295.53

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre	
Beardless Wheatgrass - Whitmar	5.00	16.30	\$58.63	
Mountain Brome - Bromar	10.00	16.07	\$38.00	
Bottlebrush Squirreltail	2.50	11.02	\$40.56	
Sandberg Bluegrass - VNS	5.00	106.18	\$42.00	
Rocky Mountain Fescue	5.00	80.35	\$36.25	
Slender Wheatgrass - Native	10.00	36.50	\$46.25	
Streambank Wheatgrass - Sodar	5.00	16.30	\$28.50	
Thickspike Wheatgrass - Critana	5.00	17.68	\$34.38	
Prairie Junegrass	2.50	132.89	\$65.00	

Totals Seed Mix	50.00	433.28	\$389.56
Application			

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

# **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

**Application** 

Description		Cost /Acre
Weed spray, hand, non-aquatic area, nox. [DMG]		\$180.00
	<b>Total Mulch Application Cost/Acre</b>	\$180.00

### **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: 5.72 Cost /Acre: \$1,132.31 Estimated Failure Rate: 30% Cost /Acre\*: \$656.78

\*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$6,476.81** Reseeding Job Cost: \$1,127.03

Total Job Cost: \$7,604 Job Hours: **80.00** 

Task description:	Repla	ice 8" Tops	oil - 5.72 Ac	res - Stage 3		
: Williams/Illinois	Gravel Pit	Per	mit Action:	2019 Bond Estimate	Permit/Job#:	M1997039
PROJECT IDEN	TIFICATIO	<u>)N</u>				
Task #: 008 Date: 8/28/2 User: PSH	2019	State: County:	Colorado Jackson		Abbreviation: Filename:	None M039-008
Agency or	organization i	name: DI	RMS			
HOURLY EQUI	PMENT CO	<u>ST</u>				
Basic Machine:	Cat D8T - 8	SU		<u> </u>		
Horsepower:	310			<u> </u>		
Blade Type:	Semi-Unive			<u> </u>		
Attachment:	3-shank ripp	er				
Shift Basis:	1 per day			<u> </u>		
Data Source:	(CRG)					
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/H	our:		\$103.86	NA		
Operating Cost/H			\$82.26	100		
Ripper own. Cost/H			\$10.43	NA		
Ripper op. Cost/H			\$8.38	100		
Operator Cost/H			\$41.24	NA	<del></del>	
					<del></del>	
Total unit Cost/Hou Total Fleet Cost/Ho		. /				
MATERIAL QU						
Initial Volume:	6,090					
Swell factor:	1.000					
Loose volume:	<b>6,090</b> LCY					
Source of estimated	volume.	Division	of Reclamati	on, Mining & Safety		
Source of estimated		Cat Hand		on, wining a barety	<del></del>	
Source of estimated	swen ractor.	- Cut Huite	.cook			
HOURLY PROD	UCTION					
Average push distan		80 feet				
Unadjusted hourly p	roduction:	984.2 LCY	/hr			
Materials consistence	cy description:	Consol	idated stock	pile 1.0		
Average push gradie	ent: -10 %					
Average push gradie Average site altitude		feet				
Average site annual	o,430	icci				
Material weight:	1,600	lbs/LCY				
Weight description:	Top S	oil				
Job Condition Corre	ection Factor			Source		
	rator Skill:	0	.750	(AVG.)		
Material co			.000	(CAT HB)		
	ng method:		.000	(GEN.)		
_ 32	Visibility:		.000	(AVG.)		
	, 1510111ty.	1	.000	(A V U.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 755.47 LCY/hr
Adjusted fleet production: 755.47 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.326/LCY

Total job time:
Total job cost:

8.06 Hours
\$1,984