



June 8, 2022

Michael D. Krauth
KrauthCo Inc
800 Garden Park Road
Cañon City, CO 81212

**Re: J&J Stone Pit #1 - File No. M-2011-004
KrauthCo Inc
Amendment Application (AM-2)**

Dear Michael D. Krauth:

On June 7, 2022 the Division of Reclamation, Mining and Safety concluded its review of the Amendment application submitted to the Division on March 17, 2022, addressing the following:

This amendment will add 7.36 acres to the permit area. This area is a topsoil stockpile and access road area. It is not an area that will be affected by material extraction.

The decision reached by the Division is: approve. An updated detailed bond estimate is enclosed.

The terms of Amendment No. 2 approved by the Division are hereby incorporated into Permit No. M-2011-004. All other conditions and requirements of Permit No. M-2011-004 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:	\$26,870.00
Prior Liability:	\$26,870.00
Change in Liability:	\$11,068.00
Revised Liability:	\$37,938.00
Prior Permit Acreage:	115.00
Change in Permit Acreage:	7.36
Revised Permit Acreage:	122.36
Prior Affected Acreage:	91.10



Change in Affected Acreage:	7.36
Revised Affected Acreage:	98.46

If you have any questions, please contact me by telephone at (303) 866-3567 x 8169, or by email at Tim.cazier@state.co.us.

Sincerely,



Timothy A. Cazier, P.E.
Environmental Protection Specialist

Enclosure: Bond estimate

cc: Angela Bellantoni, Ph.D., EAI
Sara Stevenson-Benn, DRMS

COST SUMMARY WORK

Task description: Cost Summary

Site: J&J Stone Pit #1

Permit Action: AM-02

Permit/Job#: M2011004

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/7/2022

County: Fremont

Filename: M004-000

User: TC1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade staging and processing areas	GRADER	1	7.70	\$921
002	Spread 7 inches of topsoil on 7 Ac	DOZER	1	37.06	\$9,692
003	Final grading on 10 acres	GRADER	1	7.70	\$872
004	REVEGE 2 ACARES	REVEGE	1	12.00	\$15,547
005	Mob/Demob	MOBILIZE	1	1.80	\$1,570
<u>SUBTOTALS:</u>				66.26	\$28,602

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$578

Performance bond: 1.05

Total = \$300

Job superintendent: 33.13

Total = \$2,386

Profit: 10.00

Total = \$2,860

TOTAL O & P = \$6,125

CONTRACT AMOUNT (direct + O & P) = \$34,727

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$1,476

Reclamation management and/or administration: 5.00

\$1,736

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$9,337

TOTAL BOND AMOUNT (direct + indirect) = \$37,939

MOTOR GRADER WORK

Task description: Grade staging and processing areas

Site: J&J Stone Pit #1

Permit Action: AM-02

Permit/Job#: M2011004

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 6/7/2022

County: Fremont

Filename: yes

User: TC1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 12M

Horsepower: 158

Ripper Attachment: Multi-Shank Ripper

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$47.01	NA
Operating Cost/Hour:	\$37.67	100
Ripper Ownership Cost/Hour:	\$2.95	NA
Ripper Operating Cost/Hour:	\$3.40	100
Operator Cost/Hour:	\$28.56	NA
Total Unit Cost/Hour:	\$119.59	
Total Fleet Cost/Hour:	\$119.59	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 10.00 acres

Source of estimated acreage: AM-2 Revised Exhibit L (5/25/22)

HOURLY PRODUCTION

Average Grader Speed:	<u>1.50</u>	mph
Selected Application:	<u>Finish grading (0-2.5 mph) - 1.5</u>	
Selected Blade Angle:	<u>30</u>	degrees
Effective Blade Length:	<u>10.40</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>8.40</u>	feet
Unadjusted Hourly Unit Production:	<u>1.5273</u>	acres/hour

Job Condition Correction Factors

Site Altitude: 5630 feet

Altitude Adj:	<u>1.00</u>	Source (CAT HB)
Job Efficiency:	<u>0.85</u>	(1sh/d, mod.)
Net Correction:	<u>0.8500</u>	multiplier

Adjusted Hourly Unit Production: 1.2982 acres/Hour

Adjusted Hourly Fleet Production: **1.2982** acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **7.70** Hours

Unit cost: \$92.12 per acre Total job cost: **\$921**

BULLDOZER WORKTask description: Spread 7 inches of topsoil on 7 AcSite: J&J Stone Pit #1Permit Action: AM-02Permit/Job#: M2011004**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 6/7/2022County: FremontFilename: YesUser: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$97.46	NA
Operating Cost/Hour:	\$97.63	100
Ripper own. Cost/Hour:	\$15.19	NA
Ripper op. Cost/Hour:	\$9.94	100
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$261.52	
Total Fleet Cost/Hour:	\$261.52	

MATERIAL QUANTITIESInitial Volume: 9,411Swell factor: 1.230Loose volume: **11,576 LCY**Source of estimated volume: 7 inches over 10 acresSource of estimated swell
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 170 feetUnadjusted hourly
production: 576.6 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push
gradient: 5 %Average site altitude: 5,630 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5417

Adjusted unit
production: 312.34 LCY/hr

Adjusted fleet
production: **312.34** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.837/LCY

Total job time: **37.06** Hours

Total job cost: **\$9,692**

MOTOR GRADER WORK

Task description: Final grading on 10 acres

Site: J&J Stone Pit #1

Permit Action: AM-02

Permit/Job#: M2011004

PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 6/7/2022

County: Fremont

Filename: Yes

User: TC1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 12M

Horsepower: 158

Ripper Attachment: _____

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$47.01	NA
Operating Cost/Hour:	\$37.67	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$28.56	NA
Total Unit Cost/Hour:	\$113.24	
Total Fleet Cost/Hour:	\$113.24	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 10.00 acres

Source of estimated acreage: AM-2 Revised Exhibit L

HOURLY PRODUCTION

Average Grader Speed:	<u>1.50</u>	mph
Selected Application:	<u>Finish grading (0-2.5 mph) - 1.5</u>	
Selected Blade Angle:	<u>30</u>	degrees
Effective Blade Length:	<u>10.40</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>8.40</u>	feet
Unadjusted Hourly Unit Production:	<u>1.5273</u>	acres/hour

Job Condition Correction Factors

Site Altitude: 5630 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.85</u>	(1sh/d, mod.)
Net Correction:	<u>0.8500</u>	multiplier

Adjusted Hourly Unit Production: 1.2982 acres/Hour

Adjusted Hourly Fleet Production: **1.2982** acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **7.70** Hours

Unit cost: \$87.23 per acre Total job cost: **\$872**

REVEGETATION WORKTask description: **REVEGE 2 ACARES**Site: **J&J Stone Pit #1**Permit Action: **AM-02**Permit/Job#: **M2011004****PROJECT IDENTIFICATION**Task #: **004**State: **Colorado**Abbreviation: **None**Date: **6/7/2022**County: **Fremont**Filename: **Yes**User: **TC1**Agency or organization name: **DRMS****FERTILIZING****Materials**

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

Application

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

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	\$96.50
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$386.90

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	2.40	39.17	\$32.94
Indian Ricegrass - Native	2.50	8.09	\$16.25
Sideoats Grama - El Reno	4.50	14.77	\$37.69
Western Wheatgrass - Arriba	8.00	20.20	\$52.00
Totals Seed Mix	17.40	82.24	\$138.88

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$307.02	\$614.04
Total Mulch Materials Cost/Acre				\$614.04

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$71.57
Total Mulch Application Cost/Acre	\$71.57

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:	10	Cost /Acre:	\$1,443.39
Estimated Failure Rate:	30%	Cost /Acre*:	\$370.88
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost:	\$14,433.90		
Reseeding Job Cost:	\$1,112.64		
Total Job Cost:	\$15,547		
Job Hours:	12.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**Site: **J&J Stone Pit #1**Permit Action: **AM-02**Permit/Job#: **M2011004****PROJECT IDENTIFICATION**Task #: **005**State: **Colorado**Abbreviation: **None**Date: **6/7/2022**County: **Fremont**Filename: **Yes**User: **TC1**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:	\$21.28	\$37.94	\$47.67
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	47.71	\$97.46	\$132.49	1	\$229.95	\$132.49	\$250.00
CAT 12M	16.01	\$47.01	\$68.37	1	\$115.38	\$68.37	\$250.00

Subtotals: **\$345.33** **\$200.86** **\$500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Drill/Broadcast Seeder with Tractor	\$16.28	1	\$16.28	\$16.28

Subtotals: **\$16.28** **\$16.28**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CAÑON CITY	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	25.00	mph

Total Non-Roadable Mob/Demob Cost *	\$1,563.81
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$6.51
** one round trip, no haul rig:	

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):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	0.90	0.40

JOB TIME AND COST

Total job time:	1.80	Hours
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Total job cost:	\$1,570
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