



COLORADO

**Division of Reclamation,
Mining and Safety**

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

February 7, 2018

Mr. Mike A. Tezak
Tezak Stone & Aggregate Supply, Inc.
6200 CR 37
Texas Creek, CO 81223

Re: Tezak No 2 Pit, Permit No. M-1981-080; Conversion Approval, Revision No. CN-1

Dear Mr. Tezak:

On February 5, 2018 the Division of Reclamation, Mining and Safety approved the Conversion application submitted to the Division on October 27, 2017, addressing the following:

Add 9.9 acres for a total of 19.8 acres

The terms of the Conversion No. 1 approved by the Division are hereby incorporated into Permit No. M-1981-080. All other conditions and requirements of Permit No. M-1981-080 remain in full force and effect. During the permit conversion review process, the Division received comments from the State Historical Preservation Office (SHPO). A copy of their comment letter is enclosed for your records.

A copy of the revised bond estimate was emailed to Mr. Klco on February 5, 2018 for review. A hard copy of that estimate is enclosed. The revised liability amount (\$55,535.00) exceeds the financial warranty currently held (\$17,500.00). The revision will not be final until the additional bond (\$38,035.00) is approved by the Division.

Please sign the enclosed Performance Warranty and return it to the Division for the Director's signature. Once the Director signs it, the completed Performance Warranty will be returned to you.

Sincerely,

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

Enclosures

ec: Barbara Coria, DRMS
DRMS file
Ken Klco, Azurite



COST SUMMARY WORK

Task description: Cost Summary

Site: Tezak No 2 Pit

Permit Action: CN-01

Permit/Job#: M1981080

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/5/2018

County: Fremont

Filename: M080-000

User: TC1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
005	Place topsoil	SCRAPER1	1	36.56	\$7,358.00
006	Final grading, Floor ripping	GRADER	1	12.36	\$1,105.00
010	Scale/house demolition (LS)	NA	1	4.00	\$1,000.00
015	Reveg 19.8 acres	REVEGE	1	20.00	\$31,761.00
020	Mob/Demob	MOBILIZE	1	3.57	\$2,840.00
<u>SUBTOTALS:</u>				76.49	\$44,064

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$890.09

Performance bond: 1.05

Total = \$462.67

Job superintendent: 41.95

Total = \$3,064.45

Profit: 10.00

Total = \$4,406.40

TOTAL O & P = \$8,823.61

CONTRACT AMOUNT (direct + O & P) = \$52,887.61

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$2,644.38

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$11,467.99

TOTAL BOND AMOUNT (direct + indirect) = \$55,531.99

TOTAL BOND AMOUNT (Rounded: direct + indirect) = \$55,535.00

SCRAPER TEAM WORKTask description: **Place topsoil**Site: **Tezak No 2 Pit**Permit Action: **CN-01**Permit/Job#: **M1981080****PROJECT IDENTIFICATION**Task #: **005**State: **Colorado**Abbreviation: **None**Date: **2/5/2018**County: **Fremont**Filename: **M080-005**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT**COSTShift basis: **1 per day**

Equipment Description	
-Scraper:	Cat 623G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	NA	NA
Ownership cost/hour:	\$84.05	NA	NA	NA	NA	NA
Operating cost/hour:	\$85.92	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$31.26	NA	NA	NA	NA	NA
Unit Subtotals:	\$201.23	NA	NA	NA	NA	NA
Number of Units:	1	0	0	0	0	0
Group Subtotals:	Work: \$201.23		Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: **\$201.23****MATERIAL QUANTITIES**Initial volume: **14,000**

CCY

Swell factor: **1.125**Loose volume: **15,750**

LCY

Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	2,650 lbs/LCY	Struck Volume:	18.00	LCY
Material description:	Decomposed rock - 25% Rock, 75% Earth	Heaped Volume:	23.00	LCY
Rated Payload:	55,200 pounds	Average Volume:	20.50	LCY
Payload Capacity:	20.83 LCY	Adjusted Capacity:	20.50	LCY

Cycle Time:Scraper Loading Time: 0.90 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 6250 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	-5.00	8.00	3.00	2189	0.57

Haul Time: 0.57 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	5.00	8.00	13.00	928	0.68

Return Time: 0.68 minutesTotal Scraper team cycle time: 2.85 minutesAdjusted for job conditions: 358.21 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 358.21 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 358.21 LCY/HourUnadjusted unit production/hour: 431.58 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 43.97 HoursUnit cost: \$0.562 /LCYTotal job cost: \$8,848

MOTOR GRADER WORK

Task description: Final grading, Floor ripping

Site: Tezak No 2 Pit

Permit Action: CN-01

Permit/Job#: M1981080

PROJECT IDENTIFICATION

Task #: 006

State: Colorado

Abbreviation: None

Date: 2/5/2018

County: Fremont

Filename: M080-006

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:	\$28.02	NA
Operating Cost/Hour:	\$28.28	100
Ripper Ownership Cost/Hour:	\$1.99	NA
Ripper Operating Cost/Hour:	\$2.16	100
Operator Cost/Hour:	\$28.90	NA
Total Unit Cost/Hour:	\$89.35	
Total Fleet Cost/Hour:	\$89.35	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 17.00 acres

Source of estimated acreage: Exh 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: 6250 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.90</u>	(1sh/d, fav.)
Net Correction:	<u>0.9000</u>	multiplier

Adjusted Hourly Unit Production: 1.3745 acres/Hour

Adjusted Hourly Fleet Production: **1.3745** acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **12.37** Hours

Unit cost: \$65.00 per acre Total job cost: **\$1,105**

REVEGETATION WORKTask description: Reveg 19.8 acresSite: Tezak No 2 PitPermit Action: CN-01Permit/Job#: M1981080**PROJECT IDENTIFICATION**Task #: 015State: ColoradoAbbreviation: NoneDate: 2/5/2018County: FremontFilename: M080-015User: TC1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Potassium nitrate, 13-46-0	50.00	pound	\$1.23	\$61.50
			Total Fertilizer Materials Cost/Acre	\$61.50

Application

Description	Cost /Acre
Truck whirlwind spreader (MEANS 32 01 90.13 0140)	\$111.08
Total Fertilizer Application Cost/Acre	\$111.08

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	\$90.60
Total Tilling Cost/Acre	\$90.60

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	1.00	16.32	\$16.27
Indian Ricegrass - Nespar	4.44	14.37	\$34.41
Sand Dropseed	0.20	23.88	\$2.17
Sideoats Grama - Butte	3.64	11.95	\$35.20
Sheep Fescue - Covar	1.04	16.24	\$5.44
Coneflower, Prairie	0.48	13.05	\$15.84
Streambank Wheatgrass - Sodar	2.24	7.30	\$13.64
Thickspike Wheatgrass - Critana	6.78	23.97	\$38.92
Flax, Lewis Blue	2.44	16.19	\$40.26
Siberian Wheatgrass	4.08	10.30	\$16.20
Totals Seed Mix	26.34	153.56	\$218.34

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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Total Mulch Materials Cost/Acre				\$522.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Total Mulch Application Cost/Acre	\$66.02

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:	19.8	Cost /Acre:	\$1,336.76
Estimated Failure Rate:	20%	Cost /Acre*:	\$1,336.76
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING, MULCHING		
Initial Job Cost:	\$26,467.85		
Reseeding Job Cost:	\$5,293.57		
Total Job Cost:	\$31,761		
Job Hours:	20.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**Site: **Tezak No 2 Pit**Permit Action: CN-01Permit/Job#: M1981080**PROJECT IDENTIFICATION**Task #: 020State: ColoradoAbbreviation: NoneDate: 2/5/2018County: FremontFilename: M080-020User: TC1Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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:	\$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 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
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Cat 623G	41.35	\$84.05	\$117.55	1	\$201.60	\$117.55	\$250.00
CAT 12M	16.01	\$28.02	\$88.67	1	\$116.69	\$88.67	\$250.00
Subtotals:					\$419.18	\$294.89	\$750.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>SALIDA</u>	
Total one-way travel distance:	<u>29.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,839.54</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.64</u>	<u>0.64</u>
Return Time (Hours):	<u>0.64</u>	<u>0.64</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>1.79</u>	<u>1.29</u>

JOB TIME AND COST

Total job time:	<u>3.58</u>	Hours
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Total job cost:	<u>\$2,840</u>
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