



April 1, 2024

Wyatt Webster
Holcim – WCR, Inc.
1687 Cole Blvd., Suite 300
Golden, CO 80401

RE: Table Mountain Quarry (M-1999-004), Technical Revision 3 (TR-3), Reclamation of Solar Panel Array/Ancillary Equipment

Wyatt Webster,

On April 1, 2024 the Division of Reclamation, Mining and Safety (Division) received your adequacy review response to the Division's adequacy review letter dated March 29, 2024. During review of the material submitted, the Division determined that the following issue(s) of concern need to be adequately addressed before the Technical Revision can be considered for approval. Please provide the following:

1. The Division has calculated an updated reclamation bond cost estimate based on responses to the previous adequacy letter. A copy of this cost estimate has been provided to Holcim via this letter. Please submit any comments or questions regarding this estimate to the Division. Should Holcim accept the details of the cost estimate, a Notice of Surety Increase will follow under separate cover.

Please submit your response(s) to the above listed issue(s) by **April 15, 2024**, in order to allow the Division sufficient time for review. If you cannot address the above issues by such date, please request an extension to the decision due date in order to ensure adequate time for the Division to review the materials. A decision due date of April 25, 2024 has been set. If any adequacy issues remain by the decision due date the Division may deny your request.

The Division will continue to review your Technical Revision and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please feel free to contact me at 720-868-7757 or hunter.ridley@state.co.us

Sincerely,
Hunter C. Ridley

Environmental Protection Specialist
CC: Zach Trujillo, DRMS



COST SUMMARY WORK

Task description: Cost Summary

Site: Table Mountain Quarry

Permit Action: 2023 SO Update

Permit/Job#: M1999004

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 11/8/2023

County: Fremont

Filename: M004-000

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
010	Backfill highwall, adjusted volume for cast blasting	DOZER	1	19.25	\$8,513
011	Spread topsoil all areas	DOZER	1	32.33	\$14,300
021	Haul topsoil for all areas	TRUCK1	1	152.79	\$84,400
030	Drilling and blasting (see 030.1 worksheet) @ \$1.14/CY	NA	1	5.00	\$31,068
040	Revegetation	REVEGE	1	50.00	\$57,623
050	Demo/Haul Quonset Structure	DEMOLISH	1	12.00	\$11,968
060	Mob/Demob Equipment	MOBILIZE	1	5.00	\$5,311
070	demo / disposal of solar panel and ancillary equipment	DEMOLISH	1	16.00	\$10,661
<u>SUBTOTALS:</u>				292.37	\$223,844

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$4,522

Performance bond: 1.05

Total = \$2,350

Job superintendent: 138.18

Total = \$8,993

Profit: 10.00

Total = \$22,384

TOTAL O & P = \$38,249

CONTRACT AMOUNT (direct + O & P) = \$262,093

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$11,139

Reclamation management and/or administration: 5.00

\$13,105

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$62,493

TOTAL BOND AMOUNT (direct + indirect) = \$286,337

BULLDOZER WORKTask description: **Backfill highwall, adjusted volume for cast blasting**Site: **Table Mountain Quarry**Permit Action: **2023 SO Update**Permit/Job#: **M1999004****PROJECT IDENTIFICATION**Task #: **010**State: **Colorado**Abbreviation: **None**Date: **11/8/2023**County: **Fremont**Filename: **010**User: **TC1**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$442.35**Total Fleet Cost/Hour: **\$442.35****MATERIAL QUANTITIES**Initial Volume: **29,797**Swell factor: **1.000**Loose volume: **29,797 LCY**Source of estimated volume: **TR-2 - Assume only 2/3 cast blast volume**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **2,110.5 LCY/hr**Materials consistency description: **Consolidated stockpile 1.0**Average push gradient: **-15 %**Average site altitude: **7,130 feet**Material weight: **2,800 lbs/LCY**Weight description: **Granite - Broken****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7336

Adjusted unit production: 1,548.26 LCY/hr

Adjusted fleet production: **1548.26** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.286/LCY

Total job time: **19.25** Hours

Total job cost: **\$8,513**

BULLDOZER WORKTask description: Spread topsoil all areasSite: Table Mountain QuarryPermit Action: 2023 SO UpdatePermit/Job#: M1999004**PROJECT IDENTIFICATION**Task #: 011State: ColoradoAbbreviation: NoneDate: 11/8/2023County: FremontFilename: 011User: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$442.35Total Fleet Cost/Hour: **\$442.35****MATERIAL QUANTITIES**Initial Volume: 79,005Swell factor: 1.000Loose volume: **79,005 LCY**Source of estimated volume: TR-2, Exh L, topsoil for 59 ac @ 10"Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 2,110.5 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: -10 %Average site altitude: 7,130 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.1580

Adjusted unit production: 2,443.96 LCY/hr

Adjusted fleet production: **2443.96** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.181/LCY

Total job time: **32.33** Hours

Total job cost: **\$14,300**

TRUCK/LOADER TEAM WORKTask description: Haul topsoil for all areasSite: Table Mountain QuarryPermit Action: 2023 SO UpdatePermit/Job#: M1999004**PROJECT IDENTIFICATION**Task #: 021State: ColoradoAbbreviation: NoneDate: 11/8/2023County: FremontFilename: 021User: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

Equipment Description	
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 962H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
% Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.06	\$46.00	NA	NA	NA	NA
Operating cost/hour:	\$71.88	\$40.72	NA	NA	NA	NA
% Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$32.54	\$40.71	NA	NA	NA	NA
Unit Subtotals:	\$212.48	\$127.43	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work: \$552.39		Support: \$0.00		Maint: \$0.00	

Total work team cost/hour: \$552.39**MATERIAL QUANTITIES**Initial volume: 70,111

CCY

Swell factor: 1.000Loose volume: 70,111

LCY

Source of estimated volume: TR-2, Exh L, pit floor and backfilled areaSource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 1,600

Pounds/LCY

Description: Top SoilRated Payload: 62,000

Pounds

Payload Capacity: 38.75

LCY

Truck Bed (volume) Basis:

Struck Volume:	17.10	LCY
Heaped Volume:	22.10	LCY
Average Volume:	19.60	LCY
Adjusted Volume:	22.10	LCY

Final Truck Volume Based on Number of Loader Passes: **18.06** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	4.300	LCY (heaped)
Bucket Fill Factor:	1.050	Other - moist loam (100-110%) 1.050
Adjusted Capacity:	4.515	LCY

Job Condition Corrections:

Site Altitude (ft.): 7130 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.080	minutes
Adjusted Loader Cycle Time:		0.420	minutes
Net Load Time per Truck:		1.360	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.360	Minutes	Adjusted for site altitude:	1.360	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time:
maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-5.00	3.00	-2.00	3064	0.230

Haul Time: **0.230** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	5.00	3.00	8.00	1903	0.356

Return Time: **0.356** minutesTotal Truck Cycle Time: **3.546** minutes

Loading Tool unit

Production 552.86 LCY/Hour Adjusted for job efficiency: 458.87 LCY/Hour
Truck Unit Production 305.58 LCY/Hour Adjusted for job efficiency: 253.63 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 507.27 LCY/Hour
Adjusted single truck/loader team production: 458.87 LCY/Hour
Adjusted multiple truck/loader team production: **458.87** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **152.79** Hours

Unit cost: \$1.204 /LCY Total job cost: **\$84,400**

REVEGETATION WORKTask description: **Revegetation**Site: **Table Mountain Quarry**Permit Action: **2023 SO Update**Permit/Job#: **M1999004****PROJECT IDENTIFICATION**Task #: **040**State: **Colorado**Abbreviation: **None**Date: **11/8/2023**County: **Fremont**Filename: **040**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
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$338.80

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	1.00	16.32	\$15.98
Big Bluestem - Native	4.00	11.94	\$47.27
Little Bluestem - Cimarron	2.00	11.94	\$24.97
Sideoats Grama - Vaughn	4.00	13.13	\$33.50
Pubescent Wheatgrass - Luna	6.00	12.40	\$20.40
Yellow Sweet Clover - Madrid	0.25	1.49	\$0.71
Western Wheatgrass - Arriba	5.00	12.63	\$32.50
Totals Seed Mix	22.25	79.84	\$175.31

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
	\$
Total Mulch Application Cost/Acre	\$0.00

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: 59 Cost /Acre: \$781.33
 Estimated Failure Rate: 25% Cost /Acre*: \$781.33
 *Selected Replanting Work Items: TILLING,SEEDING

Initial Job Cost: **\$46,098.47**
 Reseeding Job Cost: **\$11,524.62**
 Total Job Cost: **\$57,623**
 Job Hours: **50.00**

DEMOLITION WORK

Task description: Demo/Haul Quonset Structure

Site: Table Mountain Quarry

Permit Action: 2023 SO Update

Permit/Job#: M1999004

PROJECT IDENTIFICATION

Task #: 050

State: Colorado

Abbreviation: None

Date: 11/8/2023

County: Fremont

Filename: 050

User: TC1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Quonset Structure (intact volume)	75'L x 40'W x ~18'H	Demo. only, small or single buildings (single story) - Steel structures	41,489.00	CF	\$0.20	\$8,173.33
Loading Demo'd Quonset Structure (Operator demo'd vol.)	25 CY	Loading only, open areas (unconfined) - Track loader	25.00	CY	\$0.89	\$22.15
Haul Away Quonset Structure	25 CY (2 x 60-mile RT)	Hauling only, per mile, 12-18 CY truck - 30 mph average speed	120.00	MI	\$9.01	\$1,081.50
Demo Quonset Floor	22' x 40' x 8"	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 200 ft. push	880.00	SF	\$1.67	\$1,468.02
Demo Quonset Slab	20' x 30' x 8"	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 200 ft. push	600.00	SF	\$1.67	\$1,000.92
Demo Quonset Footer	16" x 16" x 211'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 200 ft. push	211.00	LF	\$5.00	\$1,055.95
Landfill Fee for Structure	25 CY	Dump fees - Building construction materials.	25.00	CY	\$11.10	\$277.50

Job Hours: <u>12.00</u>	Subtotal (unadjusted): <u>\$13,079.37</u>	Total Cost (adjusted for location): <u>\$11,967.62</u>
-------------------------	---	--

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob Equipment**Site: **Table Mountain Quarry**Permit Action: 2023 SO UpdatePermit/Job#: M1999004**PROJECT IDENTIFICATION**Task #: 060State: ColoradoAbbreviation: NoneDate: 11/8/2023County: FremontFilename: 060User: 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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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 D9T - 9SU	60.01	\$238.76	\$175.95	1	\$414.71	\$175.95	\$250.00
CAT 12M	16.01	\$74.98	\$82.29	1	\$157.27	\$82.29	\$250.00
Cat 623G	41.35	\$252.73	\$158.17	1	\$410.90	\$158.17	\$250.00

Subtotals: **\$982.88** **\$416.41** **\$750.00****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	\$14.81	1	\$14.81	\$14.81

Subtotals: **\$14.81** **\$14.81**

EQUIPMENT HAUL DISTANCE and Time

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

Total Non-Roadable Mob/Demob Cost * \$5,281.46
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$29.62
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.00	1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	2.50	2.00

JOB TIME AND COST

Total job time: 5.00 Hours

Total job cost: \$5,311

DEMOLITION WORK

Task description: Demo / disposal of solar panel and ancillary equipment

Site: Table Mountain Quarry Permit Action: 2023 SO Update Permit/Job#: M1999004

PROJECT IDENTIFICATION

Task #: 070 State: Colorado Abbreviation: None
Date: 3/29/2024 County: Fremont Filename: M004-070
User: HR1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 87.70 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
demo / disposal of solar panel and ancillary equipment	20 tons	USER PROVIDED ITEM	1.00	Tons	\$12,156.28	\$12,156.28

Job Hours: <u>16.00</u>	Subtotal (unadjusted): <u>\$12,156.28</u>	Total Cost (adjusted for location): <u>\$10,661.06</u>
-------------------------	---	--