

FINANCIAL ASSURANCE COST ESTIMATE

FOR:

**LOS ANGELES COUNTY
RASMUSSEN SOLEDAD ROCK QUARRY**

CA MINE ID # 91-19-0032

Prepared by:

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Reclamation Objective: Site graded and prepared for open space.

Please note: Equipment rates used in this Financial Assurance Estimate utilize Caltrans "Labor Surcharge Equipment Rental Rates". Labor Rates are reflective of California Prevailing Wages obtained from the California Division of Labor Statistics & Research.

I. PRIMARY RECLAMATION ACTIVITIES

Task: General Grading. (Quarry Surfaces, Roads and Processing Area)

Applicability: General grading of quarry surfaces, processing areas and roads will be necessary to prepare the site for return to open space.

Method: General grading and scarifying for approximately 8 acres to gently slope/grade the land and approximately 2.0 acres of road areas. Total acres equal 10.

Calculation Basis and Other Miscellaneous Information: D8R Dozer with a 14' blade (2ft. Overlap); Avg. Speed: 2.5 mph; 50 minute hour; Production Rate: 3.0 Acres/Hr.

Miscellaneous Information:

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar D8 Dozer	1	\$142	8	\$1,140
Water Truck	1	\$47	8	\$376

Total Equipment Cost for this Task: \$1,516

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$45	8	\$360
Truck Driver	1	\$29	8	\$232
Supervisor	1	\$65	8	\$520

Total Labor Cost for this Task: \$1,112

C. Materials List

Item	Quantity	\$/Unit	Cost (\$)
N/A	0	0	\$0

Total Material Cost for this Task: \$0

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$2,628

Task: *Grade quarry pit slopes (active mining areas) to meet final reclamation slope angle(s).*

Applicability: Rip and/or excavate and cut and fill, transport fill, compact and general grading of quarry pit slopes is necessary to meet final reclamation of southeast and northwest areas.

Method: Cut north and south quarry pit slopes with D8 dozer (Active Quarry Area) to rough grade and compact.

Calculation Basis and Other Miscellaneous Information: 480 ft. of quarry walls x 60 ft. avg. height and bench width of 120ft = 192,000 cu. yards. 2 Caterpillar D8R Dozer: Production Rate: 750 cu. Yds/hr. each or 329 hours. Generally grade slopes surrounding quarry pit. Water truck calculated at 25% of grading hours.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar D8 Dozer	1	\$142	256	\$36,352
Water Truck	1	\$47	64	\$3,008
Caterpillar Compactor	0	\$80	0	\$0
Caterpillar 436 FEL w/backhoe	1	\$36	40	\$1,435

Total Equipment Cost for this Task: \$40,795

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	2	\$45	296	\$26,640
Truck Driver	1	\$29	64	\$1,856
Supervisor	1	\$65	80	\$5,200

Total Labor Cost for this Task: \$33,696

C. Materials List (Ave. Quoted Cost Per)

Item	Quantity	\$/Unit	Cost (\$)
N/A	0	\$0	\$0

Total Material Cost for this Task: \$0

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$74,491

III. PLANT STRUCTURES AND EQUIPMENT REMOVAL

Description of Task: Construction of downdrains, interceptor drains, rip rap pads, splash walls and implementing SWPP.

Applicability: Drainage control on benched slopes. Interception drains equal in concrete volume to bench drains

Methods to be Used: Construction labor.

Calculation Basis and Other Miscellaneous Information:

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
CAT Backhoe	1	47	16	\$752
Concrete Pump	1	85	8	\$680

Total Equipment Cost for this Task: \$1,432

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$45	24	\$1,080
Supervisor	1	\$35	8	\$280
Laborer	1	\$33	40	\$1,320

Total Labor Cost for this Task: \$2,680

C. Disposal/Materials

Structure/Equipment	Type of Material	Volume (quantity)	Unit Cost Basis	Disposal Cost (\$)	Cost (\$)
Foundation/Footings/Concrete	Concrete	120	CY	\$125	\$15,000
Supplies	Asphalt	10,000	LS	\$1	\$10,000
Trucking	Misc.	2,300	LS	\$1	\$2,300

Total Material Cost for this Task: \$27,300

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$31,412

IV. MISCELLANEOUS COSTS

Electrical Power Closure. Construction, installation of riprap and implementation of SWPPP.

Applicability: Restoring site to open space requires removal of telephone poles and installing fencing at highest wall closure.

Method: Public utilities contracted for power removal. Labor calculated as a unit price per operator's FAE. Riprap calculated at 500 tons.

Calculation Basis and Other Miscellaneous Information: SCE/SDG&E fees for closure estimated at a rate of \$10,000.

Item / Task	Quantity	\$/Unit	#	Cost (\$)
Power Removal	1	\$10,000	1	\$10,000
Riprap	500	\$25	1	\$12,500
SWPP	1	\$12,500	1	\$12,500
Total Miscellaneous Costs				\$35,000

V. MONITORING

Applicability: Applicable to slopes and general mining areas that are revegetated.

Method: Monitor for successful revegetation and maintenance. Prepare closure report.

Calculation Basis and Other Miscellaneous Information: Revegetation monitoring estimated at \$1,000 per visit, with two visits per year. Preparation of closure report estimated at \$1,600/year.

Monitoring Task	\$/Visit	#Visits/Year	# of Monitoring Years	Cost (\$)
Revegetation Monitoring/Maintenance Year 1	\$1,600	1	1	\$1,600
Revegetation Monitoring/Maintenance Year 2	\$1,600	1	1	\$1,600
Closure Report	\$1,600	1	2	\$3,200
Total Monitoring Costs:				\$6,400

VII. SUMMARY OF COST

Total of all Primary Reclamation Activities Costs	<u>\$77,119</u>
Total of all Revegetation Costs	<u>\$9,000</u>
Total of all Plant Structures and Equipment Removal Costs	<u>\$31,412</u>
Total of all Miscellaneous Costs	<u>\$35,000</u>
Total of all Monitoring Costs	<u>\$6,400</u>
<i>Total of Direct Costs</i>	<u>\$158,931</u>
Supervision (5% of Direct Costs)	<u>\$7,947</u>
Profit/Overhead (10%)	<u>\$15,893</u>
Contingencies (10%)	<u>\$15,893</u>
Mobilization (3%)	<u>\$4,768</u>
<i>Total of Indirect Costs</i>	<u>\$44,501</u>
<i>Total of Direct and Indirect Costs</i>	<u>\$203,431</u>
(Calculated at 5% of Direct Costs)	<u>\$7,947</u>
<i>Lead Agency Administrative Cost*</i>	<u>\$7,947</u>
Total Estimated Cost of Reclamation	<u>\$211,378</u>

*Estimated at 5% of Direct Costs