

# **FINANCIAL ASSURANCE COST ESTIMATE**

**FOR:**

**LOS ANGELES COUNTY  
BERTHA 3 & 4 CLAIMS**

**CA MINE ID # 91-19-0047**

Prepared by:

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**Reclamation Objective:** Site leveled 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 50 acres to gently slope/grade the land and approximately 2.0 acres of road areas. Total acres equal 52.

**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	18	\$2,564
Water Truck	1	\$47	6	\$282

Total Equipment Cost for this Task: \$2,846

**B. Labor List**

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$45	18	\$810
Truck Driver	1	\$29	6	\$174
Supervisor	1	\$65	8	\$520

Total Labor Cost for this Task: \$1,504

**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: \$4,350

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

Applicability: Rip and general grading of quarry pit slopes is necessary to meet final reclamation slope angles.

Method: Contour quarry pit slopes with D8 dozer (Active Quarry Area) to rough grade.

Calculation Basis and Other Miscellaneous Information: 1,000 ft. of quarry wall x 20 ft. avg. depth = 22,222 cu. yards. Caterpillar D8R Dozer: Production Rate: 750 cu. Yds/hr. or 24 hours.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Caterpillar D8 Dozer	1	\$147	24	\$3,539
Water Truck	1	\$47	8	\$376

Total Equipment Cost for this Task: \$3,539

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$45	24	\$1,080
Truck Driver	1	\$29	8	\$232
Supervisor	1	\$65	8	\$520

Total Labor Cost for this Task: \$1,832

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: \$5,371

## II. REVEGETATION

**Description of Task:** *Revegetate mining and slope areas.*

Applicability: Revegetation of slopes and general mining areas. Revegetation is specified in mining and processing areas, as the site will be returned to open space and blended into surrounding topography and vegetated areas.

Methods to be Used: Revegetation tasks are aimed at controlling erosion on slopes and berms.

Calculation Basis and Other Miscellaneous Information: Broadcast seed approximately 52 acres at \$400/acre includes labor and materials.

### A. Equipment List

Equipment	Quantity	\$/Acre	# of Acres	Cost (\$)
Broadcast seeding	1	\$400	52	\$20,800
Broadcast seeding (2nd year follow-up)	1	\$400	13	\$5,200
Total Equipment Cost for this Task:				<u>\$26,000</u>

### D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$26,000

**Description of Task: Replace Topsoil**

Applicability: Topsoil sand onsite required to be spread over site before seeding.

Methods to be Used: Use front end loader to excavate, haul and distribute topsoil with labor assistance to spread topsoil.

Calculation Basis and Other Miscellaneous Information: Former quarry, processing and slopes acre areas will receive appropriate quantities of topsoil where applicable for preparation of seeding.

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
Front End Loader	1	\$36	32	\$1,148

Total Equipment Cost for this Task: \$1,148

B. Labor

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Equipment Operator	1	\$45	32	\$1,440
General Labor	1	\$33	32	\$1,056

Total Labor Cost for this Task: \$2,496

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$3,644

### III. PLANT STRUCTURES AND EQUIPMENT REMOVAL

**Description of Task:** Equipment and facilities associated with mining and processing, as well as concrete and asphalt, will be removed. Office buildings, scale house and scale, paved roads and ready mix and asphalt production areas require removal of these materials during reclamation.

Applicability:

Methods to be Used:

Calculation Basis and Other Miscellaneous Information:

A. Equipment List

Equipment	Quantity	\$/Hour	# of Hours	Cost (\$)
CAT 436 Front End Loader	1	35.88	24	\$861

Total Equipment Cost for this Task: \$861

B. Labor List

Labor Category	Quantity	\$/Hour	# of Hours	Cost (\$)
Operating Engineer	1	\$45	24	\$1,080
Supervisor	1	\$65	0	\$0
Laborer	1	\$33	8	\$264

Total Labor Cost for this Task: \$1,344

C. Disposal

Structure/Equipment	Type of Material	Volume (quantity)	Unit Cost Basis	Disposal Cost (\$)	Cost (\$)
General Site Cleanup	Misc.	300	0	\$600	\$0

Total Material Cost for this Task: \$0

D. Direct Cost for this Task

Equipment Cost + Labor Cost + Materials Cost: \$2,205

#### IV. MISCELLANEOUS COSTS

Electrical Power Closure, Fencing, or Well Closure.

Applicability: Restoring site to open space requires removal of telephone poles and installing fencing, if needed.

Method: Public utilities contracted for power removal. No fencing and/or well closure needed.

Calculation Basis and Other Miscellaneous Information: SCE/SDG&E fees for closure estimated at usual rates of \$5,000. Fencing estimated at 1,000 ft. at \$10 per foot installation. Well closure based on historical/usual closure costs of \$5,000 per well.

Item / Task	Quantity	\$/Unit	#	Cost (\$)
Power Removal	1	\$5,000	1	\$5,000
Fencing	0	10/ft	0	\$0
Close Well	0	\$5,000	0	\$0

Total Miscellaneous Costs \$5,000

**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 one visit per year. Preparation of closure report estimated at \$1600/year.

Monitoring Task	\$/Visit	#Visits/Year	# of Monitoring Years	Cost (\$)
Revegetation Monitoring/Maintenance Year 1	\$1,000	1	1	\$1,000
Revegetation Monitoring/Maintenance Year 2	\$1,000	1	1	\$1,000
Closure Report	\$1,600	1	1	\$1,600
Total Monitoring Costs:				<u>\$3,600</u>

**VII. SUMMARY OF COST**

Total of all Primary Reclamation Activities Costs	<u>\$9,721</u>
Total of all Revegetation Costs	<u>\$29,644</u>
Total of all Plant Structures and Equipment Removal Costs	<u>\$2,205</u>
Total of all Miscellaneous Costs	<u>\$5,000</u>
Total of all Monitoring Costs	<u>\$3,600</u>
	<i>Total of Direct Costs</i>
	<u>\$50,170</u>
Supervision (5% of Direct Costs)	<u>\$2,509</u>
Profit/Overhead (10%)	<u>\$5,017</u>
Contingencies (10%)	<u>\$5,017</u>
Mobilization (3%)	<u>\$1,505</u>
	<i>Total of Indirect Costs</i>
	<u>\$14,048</u>
	<i>Total of Direct and Indirect Costs</i>
	<u>\$64,218</u>
(Calculated at 5% of Direct Costs)	<i>Lead Agency Administrative Cost*</i>
	<u>\$2,509</u>
	 <b>Total Estimated Cost of Reclamation</b>
	<u><b>\$66,726</b></u>

\*Estimated at 5% of Direct Costs