

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

118A




FROM: TLMA - Transportation Department

SUBMITTAL DATE:
March 12, 2013

SUBJECT: Modification of Financial Assurance Mechanism Required by the Surface Mining and Reclamation Act (SMARA).

RECOMMENDED MOTION: That the Board of Supervisors approve Resolution 2013-070, which amends Resolution 97-261 that established a Pledge of Revenue to satisfy requirements of Section 2773.1 of the Public Resources Code for Financial Assurance to Reclaim Open Pit Mines.

BACKGROUND: The Board previously established a Pledge of Revenue as a Financial Assurance Mechanism to Reclaim Surface Mining Operations, as required by the Public Resources Code for County-operated mining sites or borrow pits used by the Transportation



Juan C. Perez
Director of Transportation and Land Management

JCP:
(Continued On Attached Page)

FINANCIAL DATA	Current F.Y. Total Cost:	\$ 0	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	N/A
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2012/2013

SOURCE OF FUNDS: Road Funds (100%)

There are no General Funds used in this project.

Positions To Be Deleted Per A-30	<input type="checkbox"/>
Requires 4/5 Vote	<input type="checkbox"/>

C.E.O. RECOMMENDATION:

APPROVE

BY: 
Tina Grande

County Executive Office Signature

FORM APPROVED COUNTY COUNSEL
BY: 
MICHELLE CLACK
DATE: 3/26/13

Departmental Concurrence

Dept't Recomm.: Consent Policy
Per Exec. Ofc.: Consent Policy

Prev. Agn. Ref. 3.35 of 6/26/12

District: 1/1,
3/3, 4/4 & 5/5

Agenda Number:

3-31

The Honorable Board of Supervisors

RE: Modification of Financial Assurance Mechanism Required by the Surface Mining and Reclamation Act (SMARA).

March 12, 2013

Page 2 of 2

Department for road construction and maintenance. SMARA requires that the Financial Assurances be adjusted annually. The adjustments account for new lands disturbed, inflation and for reclamation of lands accomplished in accordance with the approved reclamation plan (PRC2773.1(a)(3)).

The original Resolution 97-261 must be modified to adjust the reclamation costs of the individual County's sites, as contained in the Pledge of Revenue, from \$1,021,625 to \$1,073,250. The actual reclamation cost for each mining site or borrow pit is shown on Attachment A. Resolution 2013-070 supersedes any previously approved modification to Resolution 97-261 made by Resolution 98-323, Resolution 2003-178, Resolution 2006-118, Resolution 2007-388, Resolution 2008-196, Resolution 2009-184, Resolution 2010-157, Resolution 2011-163 and Resolution 2012-142. There is no current fiscal year cost associated with the future reclamation. A future expense would be incurred at the point the existing mining sites are closed. Currently, no estimated date is known or projected for the closure of any of the County's existing mining sites.

Project No. ZTR 9000

2
3 **RESOLUTION NO. 2013-070**

4 AMENDING RESOLUTION NO. 97-261

5 ESTABLISHING A PLEDGE OF REVENUE

6 FOR RECLAMATION OF COUNTY MINED LANDS

7
8 **WHEREAS**, the Board of Supervisors on November 4, 1997 adopted Resolution
9 No. 97-261, which established a pledge of revenue for reclaiming County mined lands;
10 and

11 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261, was
12 increased by Resolution No. 98-323 on November 11, 1998 for the reclamation of two
13 additional mining sites; and

14 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
15 increased by Resolution No. 2003-178 on April 29, 2003 for the reclamation of two
16 additional mining sites, and for the removal of two former mining sites; and

17 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
18 increased by Resolution No. 2006-118 on August 15, 2006 for the reclamation of the
19 expansion of one current mining site; and

20 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
21 increased by Resolution No. 2007-388 on September 4, 2007 to reflect adjustments to
22 account for new lands disturbed, inflation and for reclamation of lands accomplished in
23 accordance with the approved reclamation plan; and

FORM APPROVED COUNTY COUNSEL
MICHELLE CLACK
DATE 3/26/13

1 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
2 increased by Resolution No. 2008-196 on June 3, 2008 to reflect adjustments to
3 account for new lands disturbed, inflation and for reclamation of lands accomplished in
4 accordance with the approved reclamation plan; and

5 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
6 increased by Resolution No. 2009-184 on June 23, 2009 to reflect adjustments to
7 account for new lands disturbed, inflation and for reclamation of lands accomplished in
8 accordance with the approved reclamation plan; and

9 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
10 increased by Resolution No. 2010-157 on June 8, 2010 to reflect adjustments to
11 account for new lands disturbed, inflation and for reclamation of lands accomplished in
12 accordance with the approved reclamation plan; and

13 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
14 increased by Resolution No. 2011-163 on June 28, 2011 to reflect adjustments to
15 account for new lands disturbed, inflation and for reclamation of lands accomplished in
16 accordance with the approved reclamation plan; and

17 **WHEREAS**, the pledge of revenue established by Resolution No. 97-261 was
18 increased by Resolution No. 2012-142 on June 26, 2012 to reflect adjustments to
19 account for new lands disturbed, inflation and for reclamation of lands accomplished in
20 accordance with the approved reclamation plan; and

21 **WHEREAS**, the pledge of revenue needs to be modified to reflect annual
22 adjustments to account for new lands disturbed, inflation and for reclamation of lands
23 accomplished in accordance with the approved reclamation plan.

24
25

ATTACHMENT A

**County Mining Sites
Transportation Department
March 11, 2013**

Name	California Mine I.D Number	Reclamation Cost Estimates
Bradshaw Pit	91-33-0046	\$59,375.00
Brookside Materials Yard	91-33-0094	\$348,250.00
Bundy Canyon Pit	91-33-0049	\$118,250.00
East Benton Pit	91-33-0052	\$40,125.00
Juniper Flats Pit	91-33-0053	\$84,500.00
Little Lake Pit	91-33-0055	\$56,125.00
Markham Pit	91-33-0054	\$141,000.00
Midland Pit	91-33-0051	\$91,750.00
Mountain View Pit	91-33-0048	\$35,625.00
Terwilliger Pit	91-33-0047	\$39,500.00
Thermal Pit	91-33-0090	\$58,750.00
	TOTAL	\$1,073,250.00

ATTACHMENT A

Bradshaw Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0046
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 15
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
 (equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
CAT 120G Grader w/operator	78.68	70.14	148.82
5-axle Low Bed Truck & Trailer w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 35

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
D-8R Dozer w/operator	1	ea	284.25	9		2,558		
Motor Grader w/operator	1	ea	148.82	9		1,339		
Low Bed Truck w/driver	1	ea	173.66	8		1,389		
Water Truck w/driver	1	ea	143.37	9		1,290		
Task 1 Total				35		6,577	say	6,600

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 48

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
Foreman	1	ea	108.66	8		869		
Laborer	2	ea	51.90	20		2,076		
Water Truck w/driver	1	ea	143.37	20		2,867		
Seed mix application	435,600	sf	0.045	na		19,602		
Task 4 Total	0			48		25,415	say	25,400

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 43,500

Bond Amount

Subtotal 43,500

Supervision (5%) 2,175

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 4,350

Lead Agency Administrative Cost (10%) 4,350

Total Bond Amount 59,375

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0094
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 29.81
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

Unit costs for equipment, material and labor to be used for reclamation:
 (equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
963 Loader w/operator	137.45	70.14	207.59
Water Truck w/driver	86.55	56.82	143.37
Low Bed Truck w/driver	116.02	57.64	173.66
3-axle End Dump Truck w/driver	76.39	56.82	133.21
Truck mounted crane w/operator	97.77	70.14	167.91
Foreman		89.87	89.87
Laborer		42.67	42.67
Seed Mix @ \$35/lb			35.00

I. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 3:1 (2000 cy/ac)
 Estimated time to regrade and finish slopes to blend with surrounding area, including furrowing of slopes and ripping pit floor: 685 hours.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
D-8R Dozer w/operator	2	ea	284.25	343	97,354		
Water Truck w/driver	1	ea	143.37	171	24,551		
Task 1 Total					121,906	say	121,900

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain, install rip rap, install chain link fence and gate.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Interceptor Drain	2,875	LF	5.00	na	14,375		
Down Drain	130	LF	5.00	na	650		
Rip Rap Pad	2	ea	500.00	na	1,000		
Install Chain Link Fence & Gate	3,275	LF	10.00	na	32,750		
Task 2 Total					48,775	say	48,800

Task 3 Remove Mining Equipment

Remove non-mobile mining equipment, processing equipment, equipment boneyard, storage sheds, and other structures or equipment which was not at the site prior to mining.
 5 working days are estimated to complete this task.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	108.66	40	4,346		
Laborer	2	ea	51.90	40	4,152		
966 Loader w/operator	1	ea	207.59	40	8,303		
Truck mounted crane w/operator	1	ea	167.91	40	6,716		
Low Bed Truck w/driver	0	ea	173.66	24	0		
3-axle End Dump Truck w/driver	1	ea	133.21	24	3,197		
Task 3 Total					26,716	say	26,700

ATTACHMENT A

Brookside Material Site Financial Assurance Calculations for Reclamation

Task 4 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 57 pounds per acre (29.81 acres) by broadcasting with an automatic pressure sprayer. Mix seed into soil by dragging a chain over the area.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Foreman	1	ea	108.66	24	2,608		
Laborer	2	ea	51.90	40	4,152		
Water Truck w/driver	1	ea	143.37	24	3,441		
Seed mix application	1,298,524	sf	0.045	na	58,434		
Task 4 Total					68,634	say	68,600

Task 5 Monitoring

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for three years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	3	years	120.00	24	8,640		
Task 5 Total					8,640	say	8,600

SUBTOTAL 274,600

Bond Amount

Subtotal 274,600

Supervision (5%) 13,730

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 27,460

Lead Agency Administrative Cost (10%) 27,460

Total Bond Amount 348,250

ATTACHMENT A

**Bundy Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0049
3/11/2013**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 50
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/operator	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>> 58

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
D-8R Dozer w/operator	1	ea	284.25	18		5,116		
Motor Grader w/operator	1	ea	148.82	18		2,679		
Low Bed Truck w/driver	1	ea	173.66	4		695		
Water Truck w/operator	1	ea	143.37	18		2,581		
Task 1 Total				58		11,070	say	11,100

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ----->>>>>> 22

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
Foreman	1	ea	108.66	4		435		
Laborer	2	ea	51.90	9		934		
Water Truck w/operator	1	ea	143.37	9		1,290		
Seed mix application	1,452,000	sf	0.045		na	65,340		
Task 4 Total	0			22		67,999	say	68,000

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs		Total		
Report Preparation	4	years	120.00	24		11,520		
Task 5 Total						11,520	say	11,500

SUBTOTAL 90,600

Bond Amount

Subtotal 90,600

Supervision (5%) 4,530

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 9,060

Lead Agency Administrative Cost (10%) 9,060

Total Bond Amount 118,250

ATTACHMENT A

East Benton Material Site Financial Assurance Calculations for Reclamation

California Mine I.D Number 91-33-0052

3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 4
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		Total
	Equipment	Labor	
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor. Estimated manhours---->>>>>> 31

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	284.25	9	2,558			
Motor Grader w/operator	1	ea	148.82	9	1,339			
Low Bed Truck w/driver	1	ea	173.66	4	695			
Water Truck w/driver	1	ea	143.37	9	1,290			
Task 1 Total				31	5,883	say		5,900

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	108.66	8	869			
Laborer	2	ea	51.90	8	830			
Water Truck w/driver	1	ea	143.37	8	1,147			
Seed mix application	174,240	sf	0.045	na	7,841			
Task 4 Total				24	10,687	say		10,700

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Task 5 Total					11,520	say	11,500

SUBTOTAL 28,100

Bond Amount

Subtotal 28,100

Supervision (5%) 1,405

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 2,810

Lead Agency Administrative Cost (10%) 2,810

Total Bond Amount 40,125

ATTACHMENT A

Juniper Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0053
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 30
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
 (equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor. Estimated manhours---->>>>>> 48

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	284.25	20	5,685			
Motor Grader w/operator	1	ea	148.82	10	1,488			
Low Bed Truck w/driver	1	ea	173.66	8	1,389			
Water Truck w/driver	1	ea	143.37	10	1,434			
Task 1 Total				48	9,996	say	10,000	

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	108.66	8	869			
Laborer	2	ea	51.90	8	830			
Water Truck w/driver	1	ea	143.37	8	1,147			
Seed mix application	871,200	sf	0.045	na	39,204			
Task 4 Total	0			24	42,051	say	42,100	

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520	say	11,500
Task 5 Total					11,520		

SUBTOTAL 63,600

Bond Amount

Subtotal 63,600

Supervision (5%) 3,180

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 6,360

Lead Agency Administrative Cost (10%) 6,360

Total Bond Amount 84,500

ATTACHMENT A

**Little Lake Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0055
3/11/2013**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 5
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		Total
	Equipment	Labor	
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 79

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
D-8R Dozer w/operator	1	ea	284.25	25	7,106		
Motor Grader w/operator	1	ea	148.82	25	3,721		
Low Bed Truck w/driver	1	ea	173.66	4	695		
Water Truck w/driver	1	ea	143.37	25	3,584		
Task 1 Total				79	15,105	say	15,100

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 37

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
Foreman	1	ea	108.66	4	435		
Laborer	2	ea	51.90	18	1,868		
Water Truck w/driver	1	ea	143.37	15	2,150		
Seed mix application	217,800	sf	0.045	na	9,801		
Task 4 Total	0			37	14,255	say	14,300

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total	
Report Preparation	4	years	120.00	24	11,520	
Task 5 Total					11,520	say 11,500

SUBTOTAL 40,900

Bond Amount

Subtotal 40,900

Supervision (5%) 2,045

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 4,090

Lead Agency Administrative Cost (10%) 4,090

Total Bond Amount 56,125

ATTACHMENT A

Markham Material Site Financial Assurance Calculations for Reclamation

California Mine I,D Number 91-33-0054

3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 11.8
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 233

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	2	ea	284.25	120	34,110			
Motor Grader w/operator	1	ea	148.82	40	5,953			
Low Bed Truck w/driver	1	ea	173.66	8	1,389			
Water Truck w/driver	1	ea	143.37	65	9,319			
Task 1 Total				233	50,770	say		50,800

Task 2 Construct Drainage Structures

Construct interceptor drain, down drain & install rip rap.

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Interceptor Drain	1,150	LF	10.00	na	11,500			
Down Drain	60	LF	10.00	na	600			
Rip Rap Pad	3	ea	500.00	na	1,500			
Task 2 Total					13,600	say		13,600

Task 3 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre (6.8 acres total) by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>> 64

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	108.66	24	2,608			
Laborer	2	ea	51.90	36	3,737			
Water Truck w/driver	1	ea	143.37	24	3,441			
Seed mix application	514,008	sf	0.045	na	23,130			
Task 4 Total				84	32,916	say		32,900

Task 4 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 108,800

Bond Amount

Subtotal 108,800

Supervision (5%) 5,440

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 10,880

Lead Agency Administrative Cost (10%) 10,880

Total Bond Amount 141,000

ATTACHMENT A

Midland Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0051
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 52
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		Total
	Equipment	Labor	
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>>> 71

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	284.25	27	7,675			
Motor Grader w/operator	1	ea	148.82	9	1,339			
Low Bed Truck w/driver	1	ea	173.66	8	1,389			
Water Truck w/driver	1	ea	143.37	27	3,871			
Task 1 Total				71	14,274	say	14,300	

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	108.66	8	869			
Laborer	2	ea	51.90	8	830			
Water Truck w/driver	1	ea	143.37	8	1,147			
Seed mix application	906,048	sf	0.045	na	40,772			
Task 4 Total				24	43,619	say	43,600	

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 69,400

Bond Amount

Subtotal 69,400

Supervision (5%) 3,470

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 6,940

Lead Agency Administrative Cost (10%) 6,940

Total Bond Amount 91,750

ATTACHMENT A

**Mountain View Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0048
3/11/2013**

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 3
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

**I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)**

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
Regrade and finish slopes to blend with surrounding area, including
furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>> 31

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
D-8R Dozer w/operator	1	ea	284.25	9		2,558		
Motor Grader w/operator	1	ea	148.82	9		1,339		
Low Bed Truck w/driver	1	ea	173.66	4		695		
Water Truck w/driver	1	ea	143.37	9		1,290		
Task 1 Total				31		5,883	say	5,900

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
Mix seed into soil by dragging a chain over the area. Estimated manhours ----->>>>>> 10

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs				
Foreman	1	ea	108.66	2		217		
Laborer	2	ea	51.90	4		415		
Water Truck w/driver	1	ea	143.37	4		573		
Seed mix application	130,680	sf	0.045	na		5,881		
Task 4 Total				10		7,087	say	7,100

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 24,500

Bond Amount

Subtotal 24,500

Supervision (5%) 1,225

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 2,450

Lead Agency Administrative Cost (10%) 2,450

Total Bond Amount 35,625

ATTACHMENT A

Terwilliger Road Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0047
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 10
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours---->>>>>> 26

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
D-8R Dozer w/operator	1	ea	284.25	9	2,558		
Motor Grader w/operator	1	ea	148.82	4	595		
Low Bed Truck w/driver	1	ea	173.66	4	695		
Water Truck w/driver	1	ea	143.37	9	1,290		
Task 1 Total				26	5,138	say	5,100

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ---->>>>>> 10

Labor & Equipment	Qty	Unit	Rate	No. Man		Total	
				Hrs	Total		
Foreman	1	ea	108.66	2	217		
Laborer	2	ea	51.90	4	415		
Water Truck w/driver	1	ea	143.37	4	573		
Seed mix application	217,800	sf	0.045	na	9,801		
Task 4 Total	0			10	11,007	say	11,000

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
							Report Preparation
Task 5 Total					11,520	say	11,500

SUBTOTAL 27,600

Bond Amount

Subtotal 27,600

Supervision (5%) 1,380

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 2,760

Lead Agency Administrative Cost (10%) 2,760

Total Bond Amount 39,500

ATTACHMENT A

New Thermal Canyon Material Site Financial Assurance Calculations for Reclamation
California Mine I.D Number 91-33-0090
3/11/2013

This cost estimate is based on the following assumptions:

- 1) The maximum amount of disturbance (acres) = 10
- 2) Slopes will be recontoured and graded to blend with the surrounding area.
- 3) The finished slopes and floor of the material site will be furrowed to retain rainfall and seeds to promote revegetation.
- 4) The finished slopes and floor of the site will be reseeded by pressure spraying with a seed mix of plants native to the area.
- 5) Labor & equipment rates were based on current general prevailing wage rates issued by California Department of Industrial Relations, and Caltrans Labor Surcharge and Equipment Rental Rates.
- 6) Production rates were obtained from the Caterpillar Performance Handbook (Edition 34)

I. Unit costs for equipment, material and labor to be used for reclamation:
(equipment hourly rate includes driver/operator)

	Hourly Rate		
	Equipment	Labor	Total
D-8R Dozer w/operator	214.11	70.14	284.25
Water Truck w/driver	86.55	56.82	143.37
Motor Grader w/operator	78.68	70.14	148.82
Low Bed Truck w/driver	116.02	57.64	173.66
Foreman		108.66	108.66
Laborer		51.90	51.90
Seed Mix @ \$35/lb			35.00

II. Reclamation Tasks

Task 1 Regrade & Finish Slopes

Regrade and recontour area to a gradient no steeper than 2:1
 Regrade and finish slopes to blend with surrounding area, including
 furrowing of slopes and ripping pit floor: Estimated manhours----->>>>>> 80

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
D-8R Dozer w/operator	1	ea	284.25	27	7,675			
Motor Grader w/operator	1	ea	148.82	18	2,679			
Low Bed Truck w/driver	1	ea	173.66	8	1,389			
Water Truck w/driver	1	ea	143.37	27	3,871			
Task 1 Total				80	15,614	say		15,600

Task 2 Broadcast Seeding

Distribute native plant mix over finished slopes and mine floor. Seed mix will be distributed at a rate of 30 pounds per acre by broadcasting with an automatic pressure sprayer.
 Mix seed into soil by dragging a chain over the area. Estimated manhours ----->>>>>> 24

Labor & Equipment	Qty	Unit	Rate	No. Man		Total		
				Hrs	Total			
Foreman	1	ea	108.66	8	869			
Laborer	2	ea	51.90	8	830			
Water Truck w/driver	1	ea	143.37	8	1,147			
Seed mix application	290,400	sf	0.045	na	13,068			
Task 4 Total	0			24	15,915	say		15,900

Task 3 Monitoring

Perform a field investigation of the site each spring to monitor revegetation. Monitoring will take place for up to four years following reclamation to verify the success standards are being met.

Labor & Equipment	Qty	Unit	Rate	No. Hrs	Total		
Report Preparation	4	years	120.00	24	11,520		
Task 5 Total					11,520	say	11,500

SUBTOTAL 43,000

Bond Amount

Subtotal 43,000

Supervision (5%) 2,150

Mobilization & Demobilization (lump sum) 5,000

Profit & Overhead (included in Hrly rates for Labor & Equipment)

Contingency (10%) 4,300

Lead Agency Administrative Cost (10%) 4,300

Total Bond Amount 58,750