

Lehigh Cement Company 24001 Stevens Creek Blvd. Cupertino, CA 95014

Phone (408) 996-4000 www.lehighcement.com

September 7, 2018

Mr. Christopher J. Hoem Department of Planning and Development Land Development and Engineering County of Santa Clara 70 West Hedding St. San Jose, CA 95110

## RE: Lehigh-Permanente Quarry, State Mine ID# 91-43-0004 Financial Assurance Cost Estimate

Dear Mr. Hoem:

Please find enclosed a *Financial Assurance Cost Estimate* (FACE) for the above-referenced facility. The FACE was prepared by Mr. Travis Jokerst of EnviroMine, Inc., in accordance with Condition of Approval #14 of the facility's 2012 Reclamation Plan Amendments.

The FACE is submitted to the Planning Manager for review and approval, and serves as the basis for the amount of financial assurances required of the Mine Operator, account for disturbed and those lands to be disturbed in the following year by the surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved RPA. Cost estimates use the most up-to-date cost figures for the San Francisco Bay Area and include appropriate costs for all materials to be used, labor rates, and equipment rates used in calculating the FACE. Upon approval of the FACE by the County and review by the State Office of Mine Reclamation (OM), Lehigh will post an acceptable Financial Assurance mechanism with the Department of Planning and Development.

If you have questions or comments, please do not hesitate to contact me at 408-996-4233.

Sincerely,

ANUOIA

Tressa Jackson ↓ Area Environmental Manager

# FINANCIAL ASSURANCE COST ESTIMATE FOR

# **Permanente Quarry**

(Mine Name)

CA Mine ID # 91-<u>43-0004</u>

Reclamation Plan #/Name\_<u>Reclamation Plan Amendment for</u> Permanente Quarry/2250-13-66-10P-10EIR (M1)

Prepared by: (Name & Affiliation):

EnviroMINE, Inc. – Consultant for Lehigh

3511 Camino Del Rio South, Suite 403

San Diego, CA 92108

Date: <u>9/6/18</u>

This	financial assurance cost estimate prepared and submitted pursuant to (choose one):
	A new or amended reclamation plan
	approved on (Date):
$\checkmark$	An annual mine inspection performed on
	(Date): <u>8/9/18</u>
	Other: Please Specify:

Most Recent Approved Financial Assurance Cost Estimate

Date: <u>January 30, 2018</u>

Amount: \$ <u>54,657,484</u>

Amount of existing Financial Assurance Mechanism (s)

Date: Various

Amount: \$ <u>54,657,484</u>

## **I.SUPPORTING DOCUMENTS**

This estimate represents the cost of conducting and completing reclamation in accordance with the Surface Mining and Reclamation Act (SMARA) and the following supporting documents:

<u>Reclamation Plan Approval Date and Number</u> June 26, 2012, 2250-13-66-10P-10EIR (M1) (County of Santa Clara)

### Permits and/or Environmental Documents Approved as, or Conditioned upon, the Reclamation Plan

Site is vested.

### Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

N/A

Wage Rates used in Cost Estimate\* (cost estimates are required to use current 'General prevailing wage determinations made by the director of industrial relations' where applicable (http://www.dir.ca.gov/OPRL/PWD/index.htm) with employer labor burden added, or greater)

Department of Industrial Relations, Prevailing Wage Determinations (2017)

Equipment Rates used in Cost Estimate\* (Use current 'Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)' equipment rates published by Caltrans (http://www.dot.ca.gov/hq/construc/equipmnt.html) or other publicly available and verifiable local rates)

## Caltrans, Labor Surcharge & Equipment Rental Rates (4/1/18-3/31/19)

Equipment Production Rates used in Cost Estimate (Use of current Caterpillar Performance Handbook or equivalent published production rates is required) Caterpillar Performance Handbook, 37<sup>th</sup> Edition Means Site Work & Landscaping Cost Data, R. S. Means Company, Inc., Kingston, MA, 2018

\* Many mine sites are remote projects that require hours of travel (to and from) and sometimes require additional time to prepare for even the simplest of tasks. In accordance with Labor Code Sections 1773.1 and 1773.9, contractors are required to make travel and/or subsistence (per diem) payments to each worker to execute the work. These arrangements can be quite variable and site specific.

#### Attachments:

- 1. Bid from Aggregate Machinery Specialist for Primary Station and conveyor system
- 2. Bulldozer production rates
- 3. Scraper production rates for capping site with non-limestone material
- 4. Seed quote from Pacific Coast Seed for PCRA
- 5. Seed quote from Pacific Coast Seed for approximately 500 acres
- 6. Bid from Freedlun Hydroseeding, Inc. for applying hydroseed

## II. Description of Current Site Conditions

(i.e., disturbed acres, slope conditions, excavation depths, topsoil and overburden stockpiles, equipment and facilities, reclamation in progress, erosion control status, required corrective actions, etc.)

Current operations at the site include a quarry (Main Pit/North Quarry) that consists of a cutface with a series of benches and multiple material storage areas – East Material Storage Area (EMSA) and West Material Storage Area (WMSA). Reclamation at the quarry is conducted on an annual basis for areas at final grade and not subject to further disturbance. In 2012, reclamation work commenced in the Permanente Creek Reclamation Area (PCRA), the installation of BMP's and hydroseeding was completed in Subareas 4, 5 and 6. Current grading activities are taking place in Phase 1A of the approved mine plan. During the past year, approximately 632,000 cubic yards of material was removed from the Yeager Yard and placed in the Main Pit as part of the reclamation buttress. The material was placed in 8-foot lifts and compacted. The majority of the 639.6-acre RPA footprint is found in a fully disturbed condition with little evidence of vegetative cover. An exception to this includes areas where reclamation has begun or areas that have naturally revegetated. In total, approximately 546 acres are currently disturbed at the site. There is also a rock plant, cement plant, and various pieces of mobile equipment on the site.

III. Description of Anticipated Site Conditions (12 months from date of estimate) (i.e., increase of disturbed acres, increase of depth, increases in amount of equipment and/or facilities, required corrective actions, etc.)

It is expected that mining will continue to progress in Phase 1 of the Main Pit during the next 12 months.

IV. Description/Justification of Cost Increase/Decrease

The total cost has increased as a result of pipeline removal costs that were added to this year's update and increased costs for the hydroseed mix.

<u>V.</u> **PLANT STRUCTURES AND EQUIPMENT REMOVAL** (use multiple sheets as needed) Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

## Current Site Condition:

At this time, plant removal would involve demolishing and transporting the Rock Plant, including conveyors, crushers, screens, wash plants, scales, storage tanks, and miscellaneous structures to an offsite location. This also includes the removal of the overland conveyor that extends from the Main Pit to the Cement Plant (approx. 8,900 feet). In addition to demolition and removal of these structures, all foundations must be demolished and removed, and compacted surfaces must be ripped to prepare the site for revegetation.

Reclamation Plan Performance Standard (End Use):

At the conclusion of mining operations, all equipment, structures, and other infrastructure improvements will need to be removed from the site.

Describe tasks:

This estimate assumes the use of a crane, excavators with steel shear and grapple attachments, front-end loaders, trucks with low bed trailers, and dump trucks for dismantling and removing the plant equipment and structures. The steel structures will be cut into manageable pieces with an excavator mounted with a steel shear, with pieces placed on an over-the-road truck for removal to a scrap yard for recycling. It is estimated that there is approximately 1,000 tons of recyclable steel onsite. Current market value of scrap steel is \$160 per ton (Alco Metals, San Jose). Other non-recyclable materials will be put into roll-off dumpsters (CDR Dumpster Rental) and hauled off site. Some structures will be dismantled by shearing, cutting using a cutting torch, or simply unbolting the equipment from the support structures prior to demolition. Also, there are currently 30 pieces of mobile equipment (loaders, dozers, trucks, etc.) that would need to be loaded and hauled off site to a resale dealer. This estimate assumes two (2) hours per piece of equipment. Once the equipment is removed, it will be necessary to demolish all concrete footings and foundations. Concrete will be broken up using an excavator and a hydraulic hammer and hauled to a recycling yard. This estimate assumes that there is approximately 2,950 cubic yards of concrete to be demolished and removed from the site. Also, approximately 27,910 linear feet of water pipeline will need to be dismantled and removed from the site.

## Equipment on site wholly owned by operator?: ØYES DNO

## V. PLANT STRUCTURES AND EQUIPMENT REMOVAL (cont.)

## Methods to be used for: Processing Plant, Conveyor, & Support Structure Removal

A. Equipment – List equipment required to complete identified task (for large reclamation project sites or separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
Grove RT 635 40t Crane	\$76.83/HR	108	\$8,298
CAT 330 w/ Steel Shear	\$253.68/HR	93	\$23,592
CAT 330 w/ Grapple	\$155.96/HR	108	\$16,844
Semi-truck w/ end dump	\$76.23/HR	84	\$6,403
Semi-truck w/ 2 axle lowboy trailer	\$85.18/HR	118	\$10,051
CAT 966E Wheel Loader	\$114.34/HR	108	\$12,349
Welding Truck	\$39.96/HR	120	\$4,795
Pickup Truck (2)	\$22.02/HR	112	\$2,466

Total Equipment Cost for this Task = \$84,798

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B. Labor - List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)
Crane Operator	\$73.17/HR	108	\$7,902
Excavator Operator (2)	\$72.44/HR	201	\$14,560
Dump Truck Driver	\$58.87/HR	84	\$4,945
Lowboy Truck Driver	\$59.22/HR	118	\$6,988
Loader Operator	\$72.44/HR	108	\$7,824
Foreman	\$73.17/HR	140	\$10,244
Laborer (2)	\$52.84/HR	112	\$5,918
Welder (4)	\$53.79/HR	225	\$12,103

Total Labor Cost for this Task = \$70,484

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
Roll-off Trash Containers & Landfill Fees (15)	Mixed	20 CY.	\$592 Ea.	Inc.	\$8,880

Total Materials Cost for this Task = \$8,880

D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$164,162

E. Net Salvage Value\* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$160,000

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$4,162

\*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed.

Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs

## V. PLANT STRUCTURES AND EQUIPMENT REMOVAL (cont.)

#### Methods to be used: for Concrete Breaking and Pipeline Removal

A. Equipment – List equipment required to complete identified task (for large reclamation project sites or separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 330 Excavator w/ Rock Breaker Attachment	\$178.80/HR	92	\$16,450
CAT 330 Excavator w/ Bucket	\$140.63/HR	58	\$8,157
CAT 966E Wheel Loader	\$114.34/HR	16	\$1,829
Haul Truck (10)	\$76.23/HR	268	\$20,430
Pickup Truck	\$22.02/HR	168	\$3,699
CAT 966E Wheel Loader (for pipeline removal)	\$114.34/HR	110	\$12,577
Semi-truck w/ 2 axle lowboy trailer (for pipeline removal)	\$85.18/HR	40	\$3,407

Total Equipment Cost for this Task = \$66,549

B. Labor – List all labor categories to complete identified task

Labor Category	<b>\$/Unit</b> (incl labor burden)	# of Units	Cost (\$)
Excavator Operators (2)	\$72.44/HR	150	\$10,866
Loader Operator	\$72.44/HR	16	\$1,159
Haul Truck Driver (10)	\$58.87/HR	268	\$15,777
Laborer (2)	\$52.84/HR	116	\$6,129
Loader Operator (for pipeline removal)	\$72.44/HR	110	\$7,968
Lowboy Truck Driver (for pipeline removal)	\$59.22/HR	40	\$2,369
Laborer (4) (for pipeline removal)	\$52.84/HR	110	\$5,812

Total Labor Cost for this Task = \$50,081

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
Recycling Fee	Concrete	175 Loads	\$82/Load		\$14,350
Dumping Fee	Pipeline	12 Loads	\$500/Load		\$6,000

Total Materials Cost for this Task = \$20,350

D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$136,980

E. Net Salvage Value\* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$0

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$136,980

\*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

## V. PLANT STRUCTURES AND EQUIPMENT REMOVAL (cont.)

Methods to be used: for Mobile Equipment Removal

A. Equipment – List equipment required to complete identified task (for large reclamation project sites or separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
Semi-Truck w/ 3 axle lowboy to remove the following:	\$89.61/HR	18	\$1,613
216 Skid Steer, 226 Skid Steer, 16G Grader,			
872GP Grader, Miller 600D Welder, Allmand 695 Lite			
Towers, Water Trucks			
Semi-Truck w/ 5 axle lowboy & two pilot cars to remove:	\$2,739*/Trip	13	\$35,607
992 Loader, 944k Loader, D10 Dozer, 1050K Dozer, 850k			
Dozer, 824 Dozer, 460 Truck			

\* Based on a lump sum estimate that includes driver.

Total Equipment Cost for this Task = \$37,220

B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Units	Cost (\$)
Semi-Truck Driver	\$59.22/HR		\$1,066

Total Labor Cost for this Task = \$1,066

C. Demolition – List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be Removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost (\$)
N/A					

Total Materials Cost for this Task = \$0

D. Total Direct Cost of Structure and Equipment Removal (Sum of A+B+C)

Equipment Costs + Labor Cost + Demolition Cost = \$38,286

E. Net Salvage Value\* (Supported by properly prepared third party estimate, bid, or cost calculation.)

Net Salvage Value = \$0

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = \$38,286

\*NOTE: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

## VI. PRIMARY RECLAMATION ACTIVITY (Backfilling the Main Pit)

Describe Reclamation Activity Being Estimated

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

## **Current Site Conditions:**

This estimate's restoration scenario incorporates backfilling of the Main Pit to buttress past instabilities. To accomplish this, the West Materials Storage Area (WMSA) will be used as the primary source of backfill material, since mining byproducts (unused mined material) will not be available. A stockpile located west of the Rock Plant, that contains approximately 300,000 tons of crushed rock, will also be relocated to the main pit. Material used for backfilling is to be amended with organic matter (approximately 63,000 tons). Measures to protect surface water quality during reclamation activities consist of isolating runoff from limestone materials in the Main Pit backfill, WMSA, and EMSA. This will be accomplished during reclamation by capping reclaimed areas with a 1-foot thick layer of run-of-mine non-limestone rock (i.e., greywacke, chert, and greenstone).

Reclamation Plan Performance Standard (End Use):

Reclamation requirements for the site include the development of a benched quarry face with an overall slope gradient of 1H:1V (horizontal: vertical), while the overburden fill slopes will be reclaimed at a maximum overall slope inclination between 2.5H:1V to 2.6H:1V. The proposed end use for the quarry after reclamation is complete is open space.

Describe tasks, methods, equipment, etc.:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary. A conveyor system will be utilized to transport backfill material from the WMSA to the Main Pit and place material directly into the pit. Oversized material will be reduced by a jaw crusher to six (6) inch minus prior to loading onto the conveyor. This estimate assumes the purchase of a crusher, conveyor, and stacking system (See Attachment 1 for cost estimate). Operation and maintenance costs to run the system have been included in the tables below. Stockpiled material near the Rock Plant will be relocated to the Main Pit by using haul trucks that are loaded with a front-end loader. Organic material would be delivered to the WMSA from an offsite source and added to backfill material with a loader. Distribution of non-limestone material for capping will utilize a variety of equipment. A combination of dozers, scrapers, loaders, and haul trucks will be utilized to distribute the non-limestone capping material.

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Provide quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distances (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

After analyzing the existing and proposed topography, the total volume required for backfilling the Main Pit is estimated at 33,029,325 cubic yards. This volume accounts for material that was removed from the pit during the past year (2,234,950 cubic yards), as well as the material, from the Yeager Yard, which was placed in the pit (632,000 cubic yards). During the past year, the northern portion of the quarry was mined down to an approximate elevation of 525 feet. The conveyor system would extend approximately 10,000 feet to the WMSA. Backfilling of the Main Pit will also include grading of approximately 6,700,000 cubic yards of non-limestone material that has been identified as the "Main Slide." Materials originating from the Main Slide will be removed using a D10 bull dozer (See Attachment 2 for production rates). To optimize production from the dozers, the conveyor system will be relocated as grading progresses; average push distances will be kept at approximately 300 feet. For stockpiled material near the Rock Plant, a Cat 992 front-end-loader will load the material into haul trucks while a water truck and grader will be utilized to maintain the road network and suppress dust. It is estimated that there is 200,000 cubic vards of stockpiled material (using 1.5 tons per CY). Organic material would be delivered by trucks to the WMSA, near the hopper for the portable conveyor system, and a 938 loader will feed the material into the hopper. Approximately 710,000 cubic yards of nonlimestone material will be used for capping reclaimed areas of the site. Caterpillar production rates for a 651 Scraper are provided in Attachment 3.

## VI. PRIMARY RECLAMATION ACTIVITY (Backfilling Main Pit) (Cont.)

Describe Reclamation Activity Being Estimated

Acres:		Overburden (cy):	33,029,325
Push Distance (ft):	300 ft.	Topsoil (cy):	
Production Rate (cy/hr):	1,380 cy/hr (conveyor)		

Methods to be used:

A. Equipment – List equipment required to complete identified task (for large reclamation jobs separate mine areas)

Equipment	\$/Unit	# of Units	s Cost (\$)
Grove RT 525 Crane (for conveyor install)	\$59.80/HR	200	\$11,960
CAT 938G Loader (for conveyor install)	\$82.11/HR	200	\$16,422
CAT 315L Excavator (for conveyor install)	\$53.39/HR	200	\$10,678
Pickup Truck (2) (for conveyor install)	\$22.02/HR	400	\$8,808
42" Conveyor System Over 10,000'	L.S.*		\$8,657,700
CAT D10N Dozers (3)	\$267.76/HR	71,803	\$19,225,971
CAT D11N Dozer	\$421.49/HR	8,036	\$3,387,094
Water Truck	\$39.96/HR	8,036	\$321,119
Conveyor Operation/Maintenance	\$47.26/HR	21,503	\$1,016,232
Electricity	\$28.41/HR	21,503	\$610,900
CAT 325L Excavator (for relocating conveyor)	\$97.65/HR	80	\$7,812
CAT 988 Loader (for relocating conveyor)	\$140.77/HR	80	\$11,262

\* Quote from Aggregate Machinery Specialist (Attachment 1 – note that \$59,275 was subtracted from the total because it was counted twice in the AMS quote).

Total Equipment Cost for this Task = \$33,285,958

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B. Labor – List all labor categories to complete identified task

Labor Category	<b>\$/Unit</b> (incl labor burden)	# of Unit	Cost (\$)
Crane Operator	\$73.17/H	R 200	\$14,634
Loader Operators (2)	\$72.44/H	R 280	\$20,283
Excavator Operators (2)	\$72.44/H	R 280	\$20,283
Foreman	\$73.17/H	R 200	\$14,634
Laborers (2)	\$52.84/H	R 400	\$21,136
Dozer Operators (4)	\$72.44/H	R 79,839	\$5,783,537
Water Truck Driver	\$58.57/H	R 8,036	\$470,669

Total Labor Cost for this Task =

\$6,345,176

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C. Materials – List all materials required to complete identified task

U.	Item	Quantity	\$/unit (incl sales tax)	Cost (\$)
[		Quantity		0001(\$)

Total Materials Cost for this Task = \$0

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$39,631,134

## VI. PRIMARY RECLAMATION ACTIVITY (Stockpile Relocation, Organic Material, Capping)

Describe Reclamation Activity Being Estimated

Acres:	440	Overburden (cy):	910,000
Push Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):	454 (scraper), 520 (truck)		

Methods to be used:

A. Equipment – List equipment required to complete identified task (for large reclamation jobs separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 992C Loader (for stockpile relocation)	\$405.59/HR	195	\$79,090
CAT 777D Haul Trucks (11) (for stockpile reloc., capping)	\$240.36/HR	2,254	\$541,771
CAT 12H Blade (for stockpile relocation)	\$73.62/HR	98	\$7,215
CAT 938F Loader (for organic material mixing)	\$72.79/HR	600	\$43,674
CAT 992B Loader (2) (for non-limestone capping)	\$253.88/HR	314	\$79,718
CAT 651B Scraper (4) (for capping)	\$237.38/HR	608	\$144,327
CAT D10N Dozer (2) (for capping)	\$267.76/HR	238	\$63,727
Water Truck (for stockpile relocation & capping)	\$39.96/HR	492	\$19,660
			<b>*************</b>

Total Equipment Cost for this Task =

\$979,183

B. Labor – List all labor categories to complete identified task

D. Labor – List all labor categories to complete identified task	\$/Unit		
Labor Category	(incl labor burden)	# of Unit	Cost (\$)
Loader Operators (4)	\$72.44/HR	1,109	\$80,336
Haul Truck Drivers (11)	\$59.22/HR	2,254	\$133,482
Blade Operator	\$72.44/HR	98	\$7,099
Scraper Operators (4)	\$72.44/HR	608	\$44,044
Dozer Operators (2)	\$72.44/HR	238	\$17,241
Water Truck Driver	\$58.57/HR	492	\$28,816

Total Labor Cost for this Task = \$311,018

C. Materials – List all materials required to complete identified task

Item	Quantity	\$/unit (incl sales tax	) Cost (\$)
Organic Material *	63,000 (Tons)	\$34.40	\$2,167,200
* Cost from material supplier in Gilroy, CA, plus shipping, CPI.			

Total Materials Cost for this Task = \$2,167,200

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = <u>\$3,457,401</u>

## VI. PRIMARY RECLAMATION ACTIVITY (Ripping, Finish Grading, BMP Installation) (Cont.)

Describe Reclamation Activity Being Estimated

Acres:	498	Overburden (cy):	
Haul Distance (ft):		Topsoil (cy):	
Production Rate (cy/hr):	1 ac/hr		

Methods to be used:

A. Equipment – List equipment required to complete identified task (for large reclamation jobs separate mine areas)

\$80,596
\$00,050
\$1,247
\$68,871

Total Equipment Cost for this Task = \$150,714

B. Labor – List all labor categories to complete identified task

	\$/Unit		
Labor Category	(incl labor burden)	# of Unit	Cost (\$)
Operator (2)	\$72.44/HR	505	\$36,582
	Labor Category	Labor Category (incl labor burden)	Labor Category (incl labor burden) # of Unit

Total Labor Cost for this Task = \$

\$36,582

C. Materials – List all materials required to complete identified task

U.	Materials – List all materials required to complete identified ta	SK	\$/unit	
	Item	Quantity	(incl sales tax)	Cost (\$)

Total Materials Cost for this Task =

\$0

## VI. PRIMARY RECLAMATION ACTIVITY (Permanente Creek Reclamation Area)

Describe Reclamation Activity Being Estimated

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

#### **Current Site Conditions:**

This section describes the reclamation costs of historic mining disturbance adjacent to Permanente Creek, described as the Permanente Creek Reclamation Area ("PCRA"). The PCRA is divided into seven different subareas (numbered one through seven) with customized reclamation treatments for each subarea. In 2012, after approval of the RPA, reclamation work commenced in Subareas 4, 5 and 6 and was completed in late October. Work completed included installation of BMPs as well as hydroseeding of disturbed areas. In total, approximately nine (9) acres in the PCRA was reclaimed in 2012. In 2016, the application for permitting the restoration work with ACOE and CDFW was submitted and is in process.

## Reclamation Plan Performance Standard (End Use):

Removing a concrete half culvert located in the proposed restored stream channel is one aspect of the Permanente Creek Restoration. The concrete half culvert is located just downstream from Pond 13 and covers a length of approximately 375 feet. The reclamation plan also calls for restoration of about 2,500 linear feet of Permanente Creek. Material from historic mining has collected in the creek channel. The reclamation plan calls for removal of this material and creation of a reconfigured creek channel that is roughly 50 feet wide with a 10-foot bottom and 3:1 side slopes. A number of limestone boulders have found their way into Permanente Creek as a result of historic mining operations. These boulders range in size from approximately 10" to 3' in diameter. Once removed from the creek, boulders will be loaded onto off-road haul trucks and hauled to the North Quarry for final placement. After grading work has been completed and prior to revegetating the site temporary and permanent BMPs will be installed to manage stormwater runoff. Lastly, slopes located in Subareas 2 and 3 of the PCRA are comprised of loose unconsolidated fill material. In an effort to reduce erosion from these slopes and to provide more favorable surfaces for seed propagation, the slopes will be compacted.

Describe tasks, methods, equipment, etc.:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary. According to the CAT Handbook, an H120c hydraulic hammer attached to a 315L excavator can demolish approximately 230 cubic yards of reinforced concrete within 8 hours. Once the concrete culvert has been broken into pieces 2-feet in diameter or smaller, the excavator will be used to load the material into haul trucks. Material will be removed from the creek with an excavator, loader, and articulated haul trucks. Small boulders will be removed using hand labor, while larger boulders will be removed with an excavator and/or loader. Construction laborers will

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FACE-1 (01/17) Page 15 of 24 install straw waddles and silt fencing to manage stormwater runoff. Slopes located within

Subareas 2 and 3 will be compacted with a D8 dozer, towing a sheep's foot, that is moved up and

down the slopes by a winch.

Provide quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distances (feet), equipment production rates (cubic yards/hour, or as applicable), etc. It is estimated that approximately 130 cubic yards of concrete will need to be demolished and

removed to complete removing the concrete half culvert. There is an estimated 17,500 cubic yards of material that will be removed from the channel to create the reconfigured channel. This estimate also assumes that 200 boulders are located within the inundation limits of Permanente Creek.

## VI. PRIMARY RECLAMATION ACTIVITY (PCRA Culvert/Boulder Removal, Grading, BMPs)

Describe Reclamation Activity Being Estimated

Acres:	Overburden (cy):	17,500 (in PC Channel)
Push Distance (ft):	Topsoil (cy):	
Production Rate (cy/hr):		

Methods to be used:

A. Equipment – List equipment required to complete identified task (for large reclamation jobs separate mine areas)

Equipment	\$/Unit	# of Units	Cost (\$)
315L Excavator w/ Rock Breaker Attach. (culvert removal)	\$76.50/HF	8 6	\$459
315L Excavator w/ bucket (culvert removal)	\$53.39/HF	2	\$107
Haul Truck (4) (culvert removal)	\$76.23/HF	12	\$915
CAT 330 Excavator (channel restoration/boulder removal)	\$128.70/HF	174	\$22,394
CAT 966F Loader (channel restoration/boulder removal)	\$116.94/HF	148	\$17,307
CAT 740 Articulated Haul Truck (channel/boulder removal)	\$107.75/HF	154	\$16,594
Desiltation Basin Installation (Lump Sum est. plus CPI)	\$22,957/Basir	1 2	\$45,914
CAT D8R Dozer w/ Winch (for slope treatment)	\$161.84/HF	16	\$2,589
Sheep's Foot Attachment (for slope treatment)	\$13.75/HF	16	\$220
Pick Up	\$22.02/HF	40	\$881

Total Equipment Cost for this Task = \$107,379

B. Labor – List all labor categories to complete identified task

Labor Category	\$/Unit (incl labor burden)	# of Unit	Cost (\$)
Excavator Operators (4)	\$72.44/HR	182	\$13,184
Haul Truck Drivers (4)	\$59.22/HR	12	\$711
Loader Operators (2)	\$72.44/HR	148	\$10,721
Articulated Haul Truck Drivers (3)	\$59.22/HR	154	\$9,120
Dozer Operator	\$72.44/HR	16	\$1,159
Foreman	\$73.17/HR	8	\$585
Laborers (7)	\$52.84/HR	284	\$15,007

Total Labor Cost for this Task = \$50,487

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C. Materials – List all materials required to complete identified task

ltem	Quantity	\$/unit (incl sales tax)	Cost (\$)
Concrete Recycling Fee	8 Loads	\$82/Load	\$656
Straw Waddles	37,600 L.F.	\$5.02/L.F.	\$188,752
Silt Fencing	3,450 L.F.	\$4.46/L.F.	\$15,387

Total Materials Cost for this Task = \$204,795

D. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost =

\$362,661

## VII.REVEGETATION (use multiple sheets as needed)

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

#### Current Site Condition:

After final grading is completed, disturbed areas of the site will be revegetated with seed mixes and container stock to achieve the goals of the reclamation plan. Previous restoration planting at the Quarry has been used as a guide for revegetation planning. Revegetated areas now dominated by native species serve as a basis for anticipated revegetation success. Native species common in revegetated areas include California buckwheat, coyote brush, buckbrush and sagebrush. At this time, 13.7 acres of hydroseeding would be necessary within the PCRA and 502 acres of hydroseeding would be required on the remaining areas of the site. An additional 1.5 acres of the PCRA and 28 of the remaining reclamation area will require hand planting of container stock.

## Reclamation Plan Performance Standard (End Use):

The goal for revegetation efforts is native community restoration. This refers to the reclamation of disturbed lands to a self-sustaining community of native species which would visually integrate with surrounding lands. Revegetation is designed to control erosion and stabilize slopes against long-term erosion using plant materials capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer.

#### Describe tasks:

Prior to revegetation, growth medium will be applied to approximately 498 acres of the site. Of the 498 acres that will receive growth medium, a thickness of six inches of topsoil will be distributed over 28 acres of the site and a thickness of three inches of topsoil will be distributed over 470 acres for a total volume of 212,152 CY. To transport the material around the site, a team of off-road haul trucks will be utilized and D8 dozer will be used to spread the material. A dozer is preferred to distribute the topsoil over a wheel type tractor because its track impressions will imprint final slopes to retain seeds and increase water retention and infiltration, thereby increasing the potential for revegetative success. Using mechanical hydroseeding equipment, areas will be seeded, mulched, and composted in a single application. A hydromulch mix will contain compost, organic mulch, fertilizer and the seed mix. See Attachments 4 and 5 for seed quotes from Pacific Coast Seed. Freedlun Hydroseeding provided a conservative cost quote for the hydroseed applications (Attachment 6). Planting shrubs and trees will require the efforts of four common laborers and two pickup trucks along with the oversight of a revegetation specialist.

## VII. REVEGETATION (Cont.)

Methods to be used:

A. Equipment – List equipment required to complete identified task. For large reclamation jobs separate mine areas.

Equipment	\$/Unit	# of Units	Cost (\$)
CAT 988 Loader (for topsoil placement)	\$140.77/HR	422	\$59,405
CAT 740 Haul Truck (2) (for topsoil placement)	\$107.75/HR	844	\$90,941
Water Truck (for topsoil placement)	\$39.96/HR	422	\$16,863
CAT D8R Dozer (for topsoil placement)	\$161.84/HR	422	\$68,296
Pickup Truck (2) (for planting)	\$22.02/HR	240	\$5,285
Materials & Labor for planting in PCRA	\$16.45/Plant	2,500	\$41,125

Total Equipment Cost for this Task = \$281,915

B. Labor – List all labor categories to complete identified task.

\$/Unit		
(incl labor burden)	# of Unit	Cost (\$)
\$72.44/HR	422	\$30,570
\$59.22/HR	844	\$49,982
\$58.57/HR	422	\$24,717
\$72.44/HR	422	\$30,570
\$52.84/HR	480	\$25,363
\$92.00/HR	120	\$11,040
	(incl labor burden) \$72.44/HR \$59.22/HR \$58.57/HR \$72.44/HR \$52.84/HR	(incl labor burden)       # of Unit         \$72.44/HR       422         \$59.22/HR       844         \$58.57/HR       422         \$72.44/HR       422         \$58.57/HR       422         \$52.84/HR       480

Total Labor Cost for this Task =

\$172,241

C. Materials – List all materials required to complete identified task

Item/Plant Species	Unit of measure	Quantity	\$/unit (incl sales tax)	Cost (\$)
Pacific madrone	container	798	\$2.13	\$1,700
Grey pine	container	8,990	\$2.54	\$22,835
Coast live oak	container	824	\$2.54	\$2,093
Canyon live oak	container	824	\$2.54	\$2,093
Blue oak	container	824	\$2.54	\$2,093
Valley oak	container	824	\$2.54	\$2,093
Interior live oak	container	824	\$2.54	\$2,093
Mountain mahogany	container	3,976	\$3.10	\$12,326
Toyon	container	3,976	\$1.32	\$5,248
Scrub oak	container	3,976	\$2.13	\$8,469
California coffeeberry	container	3,976	\$1.71	\$6,799
Redberry	container	3,976	\$1.71	\$6,799
Hillside gooseberry	container	3,976	\$1.71	\$6,799
Chaparral currant	container	3,976	\$1.71	\$6,799

FACE-1 (01/17) Page 20 of 24 D. Total Direct Cost for this Task

\$88,284 Total Materials Cost for this Task = Equipment Costs + Labor Cost + Materials Cost = <u>\$542,440</u>

### VII. REVEGETATION (Cont.)

Methods to be used:

a. Equipment – List equipment required to complete identified task. For large reclamation jobs separate mine areas.

Equipment	\$/Unit	# of Units	Cost (\$)
Hydroseeding Equipment & Labor(PCRA)(excl. seed cost)*	\$6,500/Acre	13.7	\$89,050
Hydroseeding Equipment & Labor (remaining areas)	\$1,552/Acre	502	\$779,104
* Hydroseeding quote from Freedlun Hydroseeding.			

Total Equipment Cost for this Task =

\$868,154

b. Labor – List all labor categories to complete identified task.

b. Labor – List an labor categories to complete identified task.	\$/Unit		
Labor Category	(incl labor burden)	# of Unit	Cost (\$)

Total Labor Cost for this Task =

\$0

### c. Materials - List all materials required to complete identified task

Item/Plant Species	Unit of measure	Quantity	\$/unit (incl sales tax)	Cost (\$)
Artemisia californica	Pounds	8,169	\$36.00	\$294,084
Baccharis pilularis	Pounds	10,122.2	\$28.00	\$283,422
Eriogonum fasciculatum	Pounds	10,259.2	\$9.50	\$97,462
Salvia leucophylla	Pounds	1,004	\$80.00	\$80,320
Salvia mellifera	Pounds	1,564.9	\$48.00	\$75,115
Achillea millefolium	Pounds	1,031.4	\$36.00	\$37,130
Artemisia douglasiana	Pounds	530	\$64.00	\$33,920
Bromus carinatus	Pounds	3,094.2	\$8.00	\$24,754
Elymus glaucus	Pounds	3,094.2	\$15.00	\$46,413
Eschscholzia californica	Pounds	1,004	\$18.00	\$18,072
Heterotheca grandiflora	Pounds	515.7	\$70.00	\$36,099
Lotus purshianus	Pounds	551.3	\$90.00	\$49,617
Lotus scoparius	Pounds	1,004	\$36.00	\$36,144
Lupinus nanus	Pounds	502	\$45.00	\$22,590
Melica californica	Pounds	1,004	\$55.00	\$55,220
Nassella pulchra	Pounds	2,008	\$42.00	\$84,336
Poa secunda	Pounds	1,004	\$30.00	\$30,120
Trifolium willdenovii	Pounds	1,004	\$50.00	\$50,200
Plantago erecta	Pounds	41.4	\$40.00	\$1,656
Sisyrinchium bellum	Pounds	19.2	\$80.00	\$1,536

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Vulpia microstachys	Pounds	137	\$24.00	\$3,288
Carex barbarae	Pounds	3	\$400.00	\$1,200
Carex praegracilis	Pounds	3	\$95.00	\$285
Cyperus eragrostis	Pounds	6	\$140.00	\$840
Hordeum brachyantherum	Pounds	18	\$24.00	\$432
Juncus effusus	Pounds	1	\$120.00	\$120
Juncus patens	Pounds	1	\$135.00	\$135
Leymus triticoides	Pounds	6	\$80.00	\$480

Total Materials Cost for this Task =

\$1,364,990

d. Total Direct Cost for this Task

Equipment Costs + Labor Cost + Materials Cost = \$2,233,144

#### VIII. MISCELLANEOUS COSTS (use multiple sheets as needed)

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Examples of this type of cost may include temporary storage of equipment and materials off site, special one-time permits (i.e. transportation permits for extra wide overweight loads, etc.), decommissioning a process mill (I.e. decontamination of equipment), disposal of warehouse inventories, well abandonment, remediation of fueling and waste oil storage sites, septic system removal, costs to prepare closure and monitoring reports, site security, preserving potable water and maintaining utilities, etc.

Item / Task	Quantity	\$/Unit	Cost (\$)
Water Line Construction	6,000 Ft.	\$15.64/Ft.	\$93,820
Power Line Construction	20 Poles	\$2,140/Pole	\$42,799
Removal of Power Lines and Poles	20 Poles	\$354/Pole	\$7,080
Geotechnical Oversight During Backfilling			
Geotechnical Monitoring (Technician)	5,600 Hrs.	\$90.00/Hr.	\$504,000
Geotechnical Monitoring (Supervision)	280 Hrs.	\$155.00/Hr	\$43,400
Final Geotechnical Report	80 Hrs.	\$155.00/Hr	\$12,400
Permitting Costs for PCRA		L.S.	\$23,361
Wetland Delineation		L.S.	\$5,631

Total Miscellaneous Costs = \$732,491

## VIII. MONITORING COSTS

Monitoring Task	\$/Visit	# Visits/Year	# of Monitoring Years	Cost (\$)
Creek Restoration Monitoring (PCRA – 1 year)	\$105/Hr.	100 Hrs.	1	\$10,500
Geologic Monitoring (PCRA – 1 year)	\$155/Hr.	120 Hrs.	1	\$18,600
Annual Monitoring (Scientist/Tech)	\$14,984	1	5	\$74,920
Annual Monitoring (Project Manager)	\$1,640	1	5	\$8,200
Geologic Monitoring (Geologist)	\$5,467	1	5	\$27,335
Water Quality Monitoring (QSP)	\$13,800	1	5	\$69,000
Water Quality Monitoring (QSD)	\$5,480	1	5	\$27,400
Report Preparation (Scientist/Tech)	\$5,750	1	5	\$28,750
Report Preparation (Project Manager)	\$1,370	1	5	\$6,850
Annual Weed Control and General Maintenance	\$65,713	2	5	\$657,130

## **IX.SUMMARY OF COSTS**

This section shall be used to summarize all the cost sheets in one place.

(V) Total of all Plant Structures & Equipment Removal Costs	\$179,428
(VI) Total of all Primary Reclamation Activities Costs	\$43,638,492
(VII) Total of all Revegetation Costs	\$2,775,584
(VIII)Total of all Miscellaneous Costs	\$732,491
(IX) Total of all Monitoring Costs	\$928,685

Total of Direct Costs \$48,254,680

## X. Supervision / Profit & Overhead / Contingencies / Mobilization

Total Estimated Cost of Reclamation	\$56,899,505
(E)Lead Agency and/or Dept. of Conservation Administrative Costs	\$2,709,500
Total of Direct and Indirect Costs	\$54,190,005
Total of Indirect Costs	\$5,935,325
(D) Mobilization ( <u>1.9</u> %)	\$ 916.839
(C) Contingencies ( <u>4.0</u> %)	\$1,930,187
(B) Profit/Overhead ( <u>4.0</u> %)	\$1,930,187
(A) Supervision ( <u>2.4</u> %)	\$1,158,112

Attachment 1



July 12, 2016

Mr. Damien Galford *Project Manager* ENVIROMINE, INC. 135 Camino Dorado, Suite 11 Napa, CA 94558

SUBJECT:	Lehigh Hanson Permanente
QUOTE #:	1607-1074-JFM

Dear Mr. Galford,

We are pleased to forward BUDGET prices and specifications for the Primary Station at Lehigh Hanson Permanente. Final prices may vary dependent upon when and if an order is placed. These prices are valid until December 30, 2017.

Prices and deliveries are all over the place. In general factories are somewhat busy with reduced staff, handing one project at a time. There is no consistency in the market. This being said we realize this is a long term project; currently complete shipment would be accomplished in a 6-8 month period.

Our invoice EQ16118 for services in relation to this project is attached.

We trust this meets your requirements and that you will not hesitate in contacting us if you need additional information.

Very truly yours,

AGGREGATE MACHINERY SPECIALIST

John F. Mulligan

Cc: J.C. Mulligan T. ONeill

#### **ENVIROMINE**

#### Lehigh Hanson Permanente Reclamation

July 12, 2016

#### ITEM 1 Primary Station

#### 1. New Telsmith 3858 PP-VGF Portable Primary Plant consisting of the following:

Structural steel chassis with blocking supports, crusher discharge hopper, chutes, and all necessary supporting structures.

<u>Telsmith 60" x 24' Heavy Duty Vibrating Grizzly Feeder</u> complete with mild steel pan, 1/2" thick AR steel pan liner, 10' long step deck AR steel grizzly bar section, and heavy duty coil support springs with pads.

- Dual shaft gear driven vibrating unit with adjustable counterweights, 140 mm oil lubricated bearings, 1/2 HP oil lube system with electric circulating pump and oil reservoir, and drive sheave.
- Variable Frequency, 60 HP, 1800 RPM, totally enclosed, fan cooled, high torque, ball bearing, squirrel cage motor with V-belt drive for motor including motor sheave, bushing for motor sheave, v-belts for standard drive centers, and pivotal motor base

<u>Telsmith Model 38" x 58" Roller Bearing Jaw Crusher</u> complete with fabricated steel frames, manganese steel jaw dies, AR cheek plates, hydraulic locking and unlocking wedge lock mechanism with manual hand pump, toggle beam, fly wheel and crusher sheave.

- Automatic pressure oil lubrication system including 2 HP electric oil pump, oil tank, filter, pressure regulator, by-pass valve, pressure gauge, alarm system.
- Hydraulic toggle relief cylinders controlled by a hydraulic power unit with 20 HP electric driven pump, reservoir, filter, water to oil cooler, relief valve and hydraulic controls.
- V-belt drive for 1200 RPM motor including motor sheave, bushing for motor sheave and v-belts for standard drive centers. (Shaft diameter, length and keyway details must be provided if motor supplied by Customer.)
- V-belt drive guard consisting of guard with mounting bracket for attachment to standard foundations. Guards comply with most safety codes, but may require field modifications to meet specific codes.
- Quad axles and highway towing kit including axles, axle support, air brakes, wheels, tires, kingpin, mudflaps, and lights with reflectors.
- 250 HP, 1200 RPM, TEFC electric motor with slide-rails.
- 54" x 32'-3" End Discharge Conveyor complete with V-belt and torque arm reducer drive, 20 HP, 1800 RPM, TEFC, 3/60/460 electric motor, drive guard, nip guards, idlers, 3-ply 3/16" x 1/16" conveyor belting, lagged head pulley, self-cleaning tail pulley, skirting with rubber flashing, belt scraper, and backstop.

**PRICE:** ExWorks Mequon, WI

\$1,068,000.00

#### **OPTIONS/ACCESSORIES**

A. Self-contained gas engine powered 4-point hydraulic leveling system including 6" bore hydraulic rams with 36" stroke, control valves, hoses, and mounting brackets. Plant must be blocked for operation.

#### ADD:

\$ 30,450.00

\$ 40,700.00

B. Lift off motor starter panel with wiring to plant motors and variable speed control.

ADD: \$ 59,250.00

### ITEM 2 Dust Collector

#### A. DCE Model DLMV 60/15 Type F (H + K11- 15 Hp Integral Fan ) Base Model

- Finish cost: standard finish
- Seal frame assembly (tube sheet): standard –mild steel
- Inserts: mild steel
- Filter bags: Dura-Life<sup>™</sup> Polyester
- Control Box with Timer: with solenoids (NEMA 4 ENCL)
- Pressure gauge: Magnehelic
- Motor options: fan rotation
- Compressed air components: piggyback filter and regulator
- Housing assembly (upstands): vertical, unmounted
- Clamp assembly: standard

**PRICE:** fob Louisville, KY

**B.** Mounting

Designed to be installed on the discharge conveyor, removed when traveling.

Vertical mounting support, corrugated metal conveyor covers, discharge head box for conveyor.

PRICE:	fob Factory	\$	18,575.00
TOTAL:		\$	59,275.00
<u>SUMMARY – </u>	<u>[tem 1</u>		
Primary		\$1	,068,000.00
Leveling Jacks		\$	30,450.00
Motor Control		\$	59,250.00
Dust Collector w	vith Mounting	\$	59,275.00
Subtotal		\$1	,216,975.00
Sales Tax (4.819	%) – Special Rate	\$	58,536.00
Freight, estimate	ed	\$	85,189.00
TOTAL		\$1	,360,700.00

### ITEM 3 Masaba 42" x 2375' Overland Conveyor

- Frame 8" channel, bolt in cross members
- Supports 2' tall intermediate supports on 20' spacing, head end supports for 8' discharge height
- **Drive** Falk V-Class shaft mounted right-angle gear reducer assembly with cooling fan and L.S. Hindon emergency brake
- Motor 300hp electric with VFD control package
- **V-Belt Drive** with drive guard
- Capacity 2000 TPH based on 100# per cu/ft of material
- Belt Speed 511 FPM @ 212' decline
- Pulleys ENGINEERED CLASS PULLEYS
- **Take Up** Gravity take up tower on tail end
- **Belting** Quoted Separately
- Primary Belt Scraper Martin Pit Viper Primary with Twist Tensioner
- Secondary Belt Scraper Martin Secondary Scraper with tungsten-carbide blade
- V-Plow On return side
- Transition Idlers CEMA D, PPI, 20 degree sealed 5" diameter trough idlers
- Troughing Idlers CEMA D, PPI, 35 degree sealed 5" diameter trough idlers, 3.5' spacing
- Return Idlers CEMA D, PPI, sealed 5" return idlers, 10' spacing
- Self-Aligning Idlers CEMA D, PPI 50' from ends, then 100' spacing
- **Hopper** 6ft long with adjustable rubber flashing
- Switchgear NOT INCLUDED
- **Guards** Tail pulley guard, v-belt guard and nip guard on head pulley. We do not warrant that our guards will meet all local codes. It is the responsibility of the end user to have them checked by a local inspector
- Steel Shot Blasted
- **Primer** (1) coat of 2 part urethane primer
- **Paint** -(1) coat of 2 part urethane paint
- Owner's Manual (2) copies for maintenance and parts

<b>PRICE:</b>	fob, South Dakota		\$	985,000.00 each
<u>OPTIONS/A</u>	<u>CCESSORIES</u>			
A. Safety Cu	t-off switch with cable	ADD:	\$	9,875.00
B. Discharge	Hood with replaceable AR liners	ADD:	\$	3,000.00
U	unlop 42" PSR 3-1200 Granite 3/8 x <sup>1</sup> / <sub>4</sub> covers	ADD:	\$	490,000.00
	ector, Model DLVM-2010, 7 <sup>1</sup> / <sub>2</sub> Hp, nounting, support legs	ADD:	\$	28,125.00
Total for one	e (1) conveyor:		\$1	1,516,000.00
Lot of four (	4) conveyors:		\$	6,064,000.00
	81%) – Special Rate			291,070.00
Freight, estin				303,230.00
TOTAL:			\$	6,717,575.00

#### ITEM 4 Masaba 42" x 190' Pit Portable Magnum Telescoping Stacker

Conveyor Frame Main Frame – 84" Deep engineered truss Extra Chord Angle - From tail end to head end undercarriage pinning point. **Counterweight** – On-board design installed in the main frame tail Stinger Frame – 66" Deep engineered truss Stinger Drive - MASABA TRACK TECHNOLOGY. Eliminates danger of cable breakage and uncontrolled roll back - No winch or cable. Conveyor extends to 190' length Road Portability **Tubular Undercarriage** – Hydraulic raise & lower with 30 hp pumping unit Swing Axle - Pit portable tandem walking beam axle with dual (8) 385/65D-19.5 tires and wheel Axle Jacks – Jacks hydraulically lift conveyor to allow swing axle deployment Power Travel - (1) hydraulic drive with #100 chain and sprockets **Towing Eye** – For pit transport Anchor Pivot Plate - Maintains tail end during radial travel. Main & Stinger Components Drives – Class II head end Motors - (2) 60 hp/(2) 50 hp Gear Reducers – Dodge TAII shaft mount with backstop **Capacity** – 1500 TPH based on 100# per cu/ft of material at 18 degrees **Belt Speed** – 450/600 FPM Head Pulley – Heavy Duty 18" diameter drum pulley with 3/8" herringbone lagging Tail Pulley – Heavy Duty 16" diameter self-cleaning wing type pulley **Take Ups** – Screw type Belting - 3-ply 3/16" x 1/16" 330 PIW Belt Splice – Flexco mechanical steel fasteners Belt Scraper - Martin Pit Viper with Twist Tensioner Transition Idlers (main) - CEMA C, Precision, 20 degree, sealed 5" diameter idlers Troughing Idlers - CEMA C, Precision, 35 degree, sealed 5" diameter, 4' spacing Return Idlers - CEMA C, Precision, sealed 5" return idlers, 10' spacing **Self-Aligning** (main) – (1) CEMA C, Precision, self-aligning idler Self-Aligning Return (stinger) – ASGCO Tru-Trainer Return Roll Hopper – 6' long hopper with adjustable rubber flashing, radial receiving hopper and rock ledge Controls Complete Switchgear - manual operation for extend/retract, raise/lower, axle jacks, start/stop conveyors and main disconnect PLC – Manual – electric buttons control. Power travel, conveyor raise and conveyor extension. Material Flow Sensor - pauses conveyor movement when material is not present **General Specifications** Guards – Tail pulley guard, v-belt guard and nip guard on head pulley. We do not warrant that our guards will meet all local codes. It is the responsibility of the end user to have them checked by a local inspector **Steel Shot Blasted Primer** -(1) coat of 2 part urethane primer **Paint** -(1) coat of 2 part urethane paint Owner's Manual - (2) copies for maintenance and parts

<b>PRICE:</b>	fob, South Dakota	\$ 563,650.00
,,,,,,,		

924 Calle Negocio, Unit A. ♦ San Clemente, CA 92673 ♦ Phone: (949) 366-3070 ♦ Fax: (949) 366-3069 www.aggregatemachinery.net

#### **OPTIONS/ACCESSORIES**

<ul><li>A. Remote grease bank for pulley bearings</li><li>B. Wireless remote control for all manual conveyor functions 1,000 ft. range</li></ul>	ADD: ADD:		2,750.00 4,295.00
<ul><li>C. Impact idlers in lieu of steel rolls in load area</li><li>D. Safety switch, radial travel safety switches</li><li>E. Dual power travel, 4-wheel drive</li></ul>	ADD: ADD: ADD:		1,190.00 1,315.00 8,500.00
<b>Total with options:</b> Sales Tax (4.81%) – <i>Special rate</i> Freight, estimated <b>TOTAL:</b>		\$ \$ \$ \$	<b>581,700.00</b> 27,920.00 29,080.00 <b>638,700.00</b>

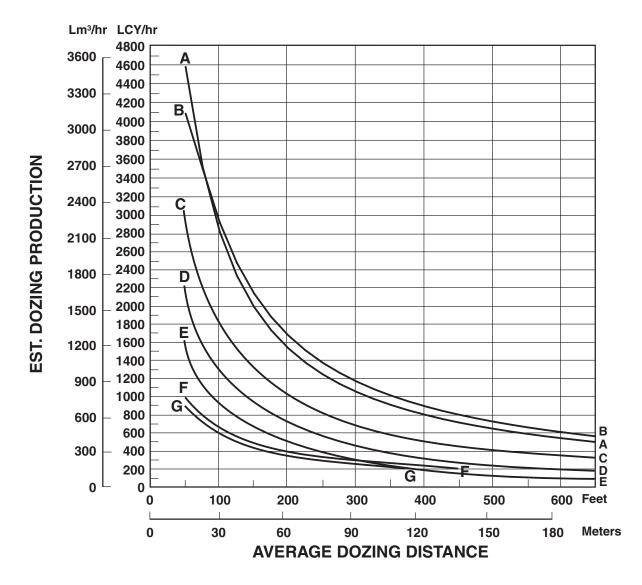
Delivery currently:	
Primary	16 – 20 weeks
Dust Collector	14 – 16 weeks
Overland Conveyor	16 – 20 weeks
Telescoping Conveyor	14 – 16 weeks

Freights are based on current freight estimates and would be invoiced at our actual cost. Sales tax is quoted at current rate and would be adjusted to appropriate rate at time of invoice. Terms to be agreed upon.

J.F. Mulligan July 12, 2016 **Attachment 2** 

Estimating Production Off-The-Job U-Blades

#### ESTIMATED DOZING PRODUCTION Universal Blades D7G through D11T



KEY

A — D11T-11U

- B D11T CD
- C D10T-10U
- D D9R/D9T-9U
- E D8R/D8T-8U F D7R Series 2-7U
- G D7G-7U

NOTE: This chart is based on numerous field studies made under varying job conditions. Refer to correction factors following these charts.

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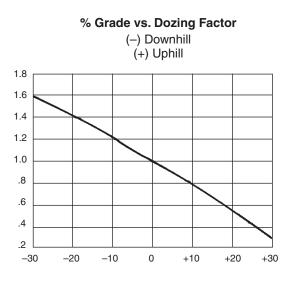
## Bulldozers

Job Factors Estimating Production Off-The-Job • Example Problem

#### JOB CONDITION CORRECTION FACTORS

	TRACK- TYPE TRACTOR	WHEEL- TYPE TRACTOR
OPERATOR —		
Excellent	1.00	1.00
Average	0.75	0.60
Poor	0.60	0.50
MATERIAL —		
Loose stockpile	1.20	1.20
Hard to cut; frozen —		
with tilt cylinder	0.80	0.75
without tilt cylinder	0.70	_
Hard to drift; "dead" (dry, non-cohesive material) or very sticky material	0.80	0.80
Rock, ripped or blasted	0.60-0.80	_
SLOT DOZING	1.20	1.20
SIDE BY SIDE DOZING	1.15-1.25	1.15-1.25
VISIBILITY —		
Dust, rain, snow, fog or darkness	0.80	0.70
JOB EFFICIENCY —		
50 min/hr	0.83	0.83
40 min/hr	0.67	0.67
BULLDOZER*		
Adjust based on SAE capacity relative to the base blade used in the Estimated Dozing Production graphs. <b>GRADES</b> — See following graph.		

\*NOTE: Angling blades and cushion blades are not considered production dozing tools. Depending on job conditions, the A-blade and C-blade will average 50-75% of straight blade production.



# ESTIMATING DOZER PRODUCTION OFF-THE-JOB

#### *Example problem:*

Determine average hourly production of a D8T/8SU (with tilt cylinder) moving hard-packed clay an average distance of 45 m (150 feet) down a 15% grade, using a slot dozing technique.

Estimated material weight is 1600 kg/Lm<sup>3</sup> (2650 lb/LCY). Operator is average. Job efficiency is estimated at 50 min/hr.

Uncorrected Maximum Production — 458 Lm<sup>3</sup>/h (600 LCY/hr) (example only)

**Applicable Correction Factors:** 

Hard-packed clay is "hard to cut" material -0.80
Grade correction (from graph)1.30
Slot dozing
Average operator0.75
Job efficiency (50 min/hr)0.83
Weight correction

 $\begin{array}{l} \mbox{Production} = \mbox{Maximum Production} \times \mbox{Correction} \\ \mbox{Factors} \end{array}$ 

= (600  LCY/hr) (0.80) (1.30) (1.20)
(0.75) $(0.83)$ $(0.87)$

$$= 405.5$$
 LCY/hr

To obtain production in metric units, the same procedure is used substituting maximum uncorrected production in Lm<sup>3</sup>.

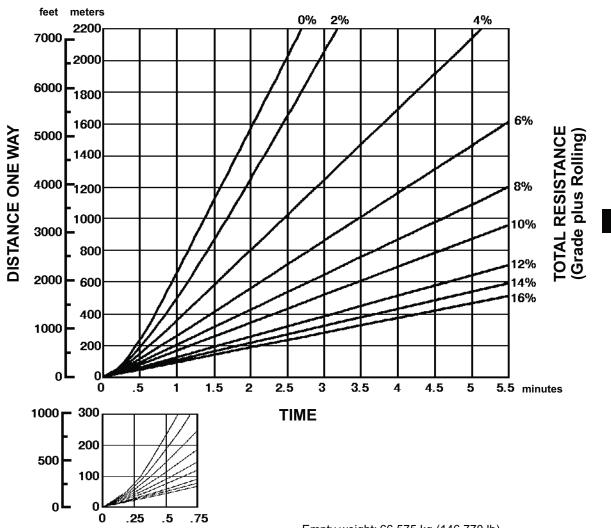
=  $458 \text{ Lm}^3/\text{h} \times \text{Factors}$ 

 $= 309.6 \text{ Lm}^{3/h}$ 

**Attachment 3** 

651E Auger Travel Time — Loaded • 40.5/75R39 Tires Wheel Tractor-Scrapers

LOADED



Empty weight: 66 575 kg (146,770 lb) Payload: 47 175 kg (104,000 lb) 8

651E Auger Travel Time — Empty ● 40.5/75R39 Tires

feet meters 0% 2% 6% 4% 2200 7000 2000 8% 6000 1800 10% 1600 TOTAL RESISTANCE (Grade plus Rolling) **DISTANCE ONE WAY** 5000 1400 12% 4000 1200 14% 1000 16% 3000 800 600 2000 400 1000 200 0 0 I .5 1 1.5 2 2.5 3 4 4.5 5 0 3.5 5.5 minutes 1000 - 300 TIME 200 500 100 0 0 .25 0 .5 .75

## EMPTY

Empty weight: 66 575 kg (146,770 lb)

**Attachment 4** 



Warren Coalson Enviromine, Inc. 3511 Camino Del Rio South, Suite 403 San Diego, CA 92108

September 6, 2018

Re: Permanente Quarry Cupertino

Dear Mr. Coalson:

Thank you for contacting Pacific Coast Seed, Inc. as your seed supplier for the above referenced project. We anticipate that we will have the below listed seed in sufficient quantities to seed the ~13.70 acres located in Cupertino, CA. The below items have been priced assuming the seed is provided on a Standard Commercial Quality basis. These items will be mixed and labeled in accordance with California and Federal Seed Laws and consist of the following:

SCIENTIFIC NAME	COMMON NAME	Pounds Per Acre Bulk Seed	Cost Per Pound Bulk Seed
	SHRUBS		
Artemisia californica	coastal sagebrush	10	\$36.00
Baccharis pilularis	coyotebrush	6	\$28.00
		16	
Eriogonum fasciculatum	Eastern Mojave buckwheat		\$9.50
Lotus scoparius (now known as		2	
Acmispon glaber)	deer weed		\$36.00
Salvia mellifera	black sage	4.3	\$48.00
	GRASSES AND HER	BS	
Achillea millefolium	common yarrow	2	\$36.00
		1.9	
Artemisia douglasiana	Douglas' sagewort		\$64.00
Bromus carinatus	California brome	10	\$8.00
Clarkia purpurea ssp.		1	
Clarkia purpurea ssp. quadrivulnera	winecup clarkia		\$85.00
Elymus glaucus	blue wildrye	6	\$15.00
~~~~~~		1	
Heterotheca grandiflora	telegraph weed		\$70.00
Lotus purshianus (now known		3.6	
as Acmispon americanus)	Spanish Clover		\$90.00
Plantago erecta	dotseed plantain	3	\$40.00

Table 1:

Sisyrinchium bellum	western blue-eyed grass	1.4	\$80.00
Vulpia microstachys	small fescue	10	\$24.00

Table 2:

Scientific Name	Common Name	Lb/Acre	Price/Lb
Artemisia douglasiana	mugwort	2	\$64.00
Carex barbarae	valley sedge	3	\$400.00
Carex praegracilis	field sedge	3	\$95.00
Cyperus eragrostis	tall flatsedge	6	\$140.00
Hordeum brachyantherum	meadow barley	18	\$24.00
Juncus effusus	bog rush	1	\$120.00
Juncus patens	common rush	1	\$135.00
Leymus triticoides	creeping wildrye	6	\$80.00
Total		40	

Please provide a purchase order by June 1<sup>st</sup> on the year preceding that in which the seed purchase is intended. Some items may require extra collections be made in advance to assume supply of the quantities requested.

Thank you again for consulting Pacific Coast Seed, Inc. as your seed supplier for this project. We look forward to working with you on future projects.

Sincerely,

**Pacific Coast Seed, Inc** 

Kitty Juckot

Kitty Luckert Office Manager

**Attachment 5** 



Warren Coalson Enviromine, Inc. 3511 Camino Del Rio South, Suite 403 San Diego, CA 92108

September 06, 2018

Re: Permanente Quarry Cupertino

Dear Mr. Coalson:

Thank you for contacting Pacific Coast Seed, Inc. as your seed supplier for the above referenced project. We anticipate that we will have the below listed seed in sufficient quantities to seed the ~517 acres located in Cupertino, CA. The below items have been priced assuming the seed is provided on a Standard Commercial Quality basis. These items will be mixed and labeled in accordance with California and Federal Seed Laws and consist of the following:

SCIENTIFIC NAME	COMMON NAME	Pounds Per Acre	Cost Per Pound Bulk
SCIENTIFIC NAME	COMMON NAME	Bulk Seed	Seed
	SHRUBS		
Artemisia californica	coastal sagebrush	16 (8) *	\$36.00
Baccharis pilularis	coyotebrush	20 (6) *	\$28.00
		20 (10) *	
Eriogonum fasciculatum	California buckwheat		\$9.50
Salvia leucophylla	Purple sage	2 *	\$80.00
Salvia mellifera	black sage	3	\$48.00
	GRASSES AND H	ERBS	
Achillea millefolium	common yarrow	1	\$36.00
		1 (2) *	
Artemisia douglasiana	Douglas' sagewort		\$64.00
Bromus carinatus	California brome	6 (8)	\$8.00
		6 (8)	
Elymus glaucus	blue wildrye		\$15.00
Eschscholzia californica	California Poppy	2 (1.5)	\$18.00
Heterotheca grandiflora	telegraph weed	1 *	\$70.00
		1 (1.5)	
Lotus purshianus	Spanish Clover		\$90.00
Lotus scoparius	Deerweed	2	\$36.00
Lupinus nanus	Sky lupine	1 (2)	\$45.00
Melica californica	Californica melic	2	\$55.00

Table 1:

		4	
Nasella pulchra	Purple needlegrass		\$42.00
		2	
Poa secunda	One-sided bluegrass		\$30.00
		2	
Trifolium wildenovii	Tomcat clover		\$50.00
Total		93	

Please provide a purchase order by June 1<sup>st</sup> on the year preceding that in which the seed purchase is intended. Some items may require extra collections be made in advance to assume supply of the quantities requested and are noted with a \*. Numbers in () show the more usual seeding rates for these seeds.

Thank you again for consulting Pacific Coast Seed, Inc. as your seed supplier for this project. We look forward to working with you on future projects.

Sincerely,

Pacific Coast Seed, Inc

Kitty Jucket

Kitty Luckert Office Manager

Attachment 6

## FREEDLUN HYDROSEEDING INC

## 518 BAYWOOD CT, VACAVILLE, CA 95688

LICENSE #740810 8 0 0 - 3 0 0 - 9 4 2 3 7 0 7 - 4 4 8 - 9 4 2 3 F A X 7 0 7 - 4 4 6 - 8 1 4 6

DEAN@FREEDLUN.NET OR TERRI@FREEDLUN.NET

## Price Quote

September 6, 2018 Travis Jokerst EnviroMine, Inc. RE: Reclamation Cost Estimate 2018

Hello Travis Please find our updated pricing for the following BFM products: Hydroseed using Flexterra: 20+ acres @ \$6,500.00 per acre Hydroseed using HydroBlanket: 20 + acres @ \$4,900.00 per acre Both products shall be applied @ 4,000 lbs/acre

This quote is for one application. Should more applications be required, additional charges will apply. Full payment of the quoted price is due within 30 days of application. Late payments will incur an additional fee of 1.5% per month.

This quote assumes customer will provide legal access to the property and to an ample water supply. If no water is available, let us know. This quote excludes any soil prep, soil amendments, any guarantee of growth, watering, weeding, or maintenance. The seed we purchase is determined by the details you have provided and authorized above, and is State inspected for germination percentages.

If a payment & performance bond is required, our rate is 3%. Unless we have been notified of such requirement in writing, the cost of any bond is not included in our quote, and will be added to the final quoted price. Our company is SB/MICRO certified through the State of California.

Due to the changing prices of seed, the quoted price is good for 60 days. Let us know if you want to 'Lock-in' a price for a date more than 2 months away.

To accept this proposal, initial where indicated, sign and date below & fax back to 707-446-8146. Once accepted, this quote will become a contract.

In any legal action undertaken to enforce its terms, the successful party will be entitled to any and all attorney fees and legal costs incurred in connection with such an enforcement action.

x	_ Date	Initial Required Above
Printed name	Title	