APPENDIX A
SUPER CREEK QUARRY EXPANSION REVISED BLM PLAN OF OPERATIONS AND AMENDED RECLAMATION PLAN NO. 137

SUPER CREEK QUARRY EXPANSION

REVISED BLM PLAN OF OPERATIONS and AMENDED RECLAMATION PLAN No. 137

CA ID #91-33-0003

Prepared for:

Painted Hills Mining Company
58645 Old Highway 60
Whitewater, California 92282

Prepared by:

LILBURN CORPORATION
1908 Business Center Drive
San Bernardino, California 92408

Updated January 2013

EXECUTIVE SUMMARY

Painted Hills Mining Company (Painted Hills) is submitting this revised Plan of Operations and amended Reclamation Plan (Revised Plan) for the expansion and the ongoing reclamation of the existing Super Creek Quarry (CA ID #91-33-003) on public federal lands managed by the Bureau of Land Management (BLM). The first half of this Revised Plan provides information as required by 43 Code of Federal Regulations (CFR) 3809.401. The second half of the Revised Plan includes a Reclamation Plan description in a format as recommended under the California Surface Mining and Reclamation Act (SMARA) with the State Mining and Geology Board (SMGB) acting as the local lead agency.

This Revised Plan incorporates recommendations from the SMGB review letters dated February 17, 2009, September 19, 2012, and December 10, 2012. Additional assessment and measures are included in the Revised Plan as recommended in the supplemental "Slope Stability Investigation" by CHJ Consultants in May 2012, February 2011, and January 2013 (see Appendices H-1, H-2, and H-3), the "Amended Erosion Control Designs" by Stantec (see Appendix I-1), the updated runoff and sedimentation basin calculations (see Appendix I-3), the updated Storm Water Pollution Prevention Plan (SWPPP) by Stantec (see Appendix L), and the "Revegetation Report" by Paul Kielhold (see Appendix J-2).

The Super Creek Quarry is located approximately 2 miles north of Interstate 10 (I-10), east of the Whitewater River in the far western portion of the City of Desert Hot Springs in Riverside County. Super Creek Quarry is situated on public lands under the jurisdiction of the BLM on placer and lode mining claims controlled by Painted Hills in Section 36, Township 2 South, Range 3 East, SBBM and in assessor's parcel number 514-260-012.

The Super Creek Quarry (previously known as Painted Hills Mine) has been in operation since the 1950s prior to SMARA of 1975 **[**mined lands prior to January 1, 1976 are not subject to SMARA's requirement of a reclamation plan for, or the reclamation of, such lands (Pub. Res. Code Section 2776).]. Currently, Painted Hills operates under an approved BLM Plan of Operations (CA-47363 & CA-39566) and Reclamation Plan No. 137. Originally, the project site's Reclamation Plan No. 108 was approved by the County of Riverside in 1978 and this was replaced with Reclamation Plan No. 137, approved by the County in 1995. The mine area was annexed into the City of Desert Hot Springs in 2001. The City does not have a certified surface mining ordinance pursuant to SMARA and therefore the SMGB is the acting lead agency for the administration of SMARA. In addition, Painted Hills holds a Right-of-Way Grant (ROW) for the Super Creek access road (CA-22568 signed in 1993 with a 30-year effective date) that is approximately 15,400 feet in length and 50 feet wide).

Painted Hills supplies material to Whitewater Rock, a leading stone and building supply company. Currently, they stock the greatest variety and largest inventory of building stone in California. One of their prime products is the Palm Springs Gold variety of decorative rock that Painted Hills and its predecessors has been mining at the Super Creek Quarry for decades. This quarry expansion is to add additional quarry area on two small hilltops just west of the existing quarry operation and additional project areas for the proposed Northwest and Southwest Waste

Placement Areas. Currently, operations are located on approximately 23.8 acres and inactive tailings slopes cover approximately 27 acres on the east slopes (see Table ES-1). Additional areas planned for mining, waste placement areas, and sediment basins will total approximately 33.4 acres, for a total project area of 105.2 acres. Approximately 12 acres will remain undisturbed along the west boundary and 9 acres along the south boundary. The expansion area will provide the required decorative rock product to serve the local market for the upcoming 25 years.

This Amended consists of the following main elements:

- Expand the hilltop rock quarry operation to a total of 57.2 acres within an overall project site of 105.2 acres that incorporates small areas previously outside the 1978 Plan boundaries by extending the Reclamation Plan boundary to the east side of the Super Creek access road;
- Add approximately 9 acres to the south;
- Establish a 25-year mining life, terminating 25 years after the approval of the proposed expansion and reclamation plan;
- Continue the annual extraction rate of approximately 50,000 tons (30,000 banked cubic yards) per year;
- Continue use of the small portable crushing/screening plant onsite for processing;
- Continue to reclaim and monitor the Eastern Tailings Slopes to reduce erosion and maintain stability;
- Incorporate, enhance, expand, and maintain the erosion control basins established at the base of the waste material slopes on the east side of the Super Creek Road in November 2007;
- Contour mining features and revegetate disturbed areas to minimize aesthetic and erosional impacts; and
- Reclaim and maintain the site as necessary to eliminate hazards to public health and safety.

Table ES- 1
Existing and Proposed Quarry Areas (acres)
Super Creek Quarry

	Quarry Areas	**Eastern Tailings Slopes (including existing basins & channel)**	**Undisturbed Areas[1]**	**Total Area**
Current Mine Site	23.8	27	---	50.8
Proposed Expansion	33.4[2]	0	21	54.4
Total Project Area	**57.2**	**27**	**21**	**105.2**

[1] These areas are to the west and south of the proposed quarry expansion and will not be mined or otherwise impacted, but may experience some boulder roll down. Erosion control methods are planned as necessary.
[2] Includes approx. one acre of additional basins and northern pipeline area from the NW Waste Placement Area.

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY i

REVISED PLAN OF OPERATIONS AS REQUIRED BY 43 CFR 3809.401

(a) Introduction 1
(b) (1) Operator Information 1
(2) Description of Operations 2
(i) Maps 3
(ii) Design and Operations 3
(iii) Water Management Plans 7
(iv) Rock Characterization and Handling Plans 7
(v) Quality Assurance Plans 7
(vi) Spill Contingency Plan 7
(vii) Schedule of Operations from Start through Closure 8
(viii) Plan for Roads and Services 9
(3) Reclamation Plan 9
(i) Drill Hole Plugging 10
(ii) Regrading and Reshaping 10
(iii) Mine Reclamation 10
(iv) Riparian Mitigation 11
(v) Wildlife Habitat Rehabilitation 11
(vi) Topsoil Handling 11
(vii) Revegetation 11
(viii) Isolation and Control of Acid Forming Toxic or Deleterious Materials 12
(iv) Removal or Stabilization of Structures 12
(x) Post-Closure Management 12
(4) Monitoring Plans 12
(5) Interim Management Plan 14
(c) Baseline Environmental Information 14
(d) Reclamation Cost Estimate 15

AMENDED RECLAMATION PLAN (PER SMARA)

SITE AND AREA CHARACTERISTICS

1. Access 16
2. Utilities 16
3. Land Use 16
4. Visibility 19
5. Geology 19
6. Hydrology 20

TABLE OF CONTENTS

Page

7. Soils 22
8. Vegetation 22
9. Wildlife 22

MINING

1. Mineral Commodity 24
2. Mining Operation 24
3. Project Life 26
4. Size 26
5. Excavations 26
6. Anticipated Production of Commodity and Waste Material 27
7. Planned Ore Processing Methods Onsite 27
8. Production Water Data 28
9. Mine Wastes 28
10. Imported Waste 29
11. Erosion and Sedimentation Control 29
12. Blasting 41
13. Truck Traffic 41

RECLAMATION

1. Subsequent Uses 43
2. Reclamation Schedule 43
3. Future Mining 46
4. Public Safety 46
5. Post-Reclamation 46
6. Drainage and Erosion Control 47
7. Slopes and Slope Treatment 47
8. Pit Areas and Excavations 48

8.5. Quarry Ramps, Roads and BLM Right-of-Way Road Serial No. CA-22568 49

9. Ponds, Reservoirs, Tailings, Wastes 49
10. Clean-up 49
11. Contaminants 49
12. Soils and Fine-Textured Waste 50
13. Revegetation 50
14. Monitoring and Maintenance 54
15. Reclamation Assurance 57

TABLE OF CONTENTS

Page

LIST OF FIGURES

Figure 1 Vicinity Map 17
Figure 2 Location Map 18
Figure 3 Erosion Control Plan Site Layout Map 31
Figure 4 Erosion Control Plan for Northwest Waste Placement Area 32
Figure 5 Erosion Control Plan for Central Quarry Area 33
Figure 6 Erosion Control Plan Detail Proposed Southwest Waste Placement Area 34
Figure 7 Erosion Control Plan for Central Quarry Area 36
Figure 8 Sediment Basins (Typical) 39

LIST OF TABLES

Table ES-1 Existing and Proposed Quarry Areas ii

Table 1 Existing and Proposed Quarry Areas 2
Table 2 Sedimentation Basins 40
Table 3 Reclamation Schedule (Phases) 45
Table 4 Summary of Vegetation Baseline Data 51
Table 5 Revegetation Seed Mix 52
Table 6 Recommended Revegetation Success Criteria 54

ATTACHED SHEETS

Sheet 1 - Mine Plan
Sheet 2 - Reclamation Plan

ATTACHMENTS

Attachment 1 Topographic Survey Map – Massaro & Welsh 2007
Attachment 2 Irrevocable Letter of Credit for Currently Approved Financial Assurance
Attachment 3 Interim Management Plan

LIST OF APPENDICES

(Included on CD)

Appendix A Baseline Biological Survey, *Biological Resource Specialists (January 2005)*

Appendix B 2005 Spring Survey, *Biological Resource Specialists (August 2005)*

TABLE OF CONTENTS

Appendix C	Identification and Evaluation of Historic Properties, *CRM Tech (September 2004)*
Appendix D	Addendum to Historical/Archaeological Survey Report, *CRM Tech (November 2006)*
Appendix E	Visual Impact Analysis, *Webber & Webber Mining Consultants, Inc. (December 2004)*
Appendix F	Revegetation Plan, *LSA Associates (Aug. 2006)*
Appendix G	Financial Assurance Cost Estimate, *Webber & Webber Mining Consultants, Inc. (September 2008 – acceptable to SMGB through 2011)*
Appendix H-1	"Slope Stability Investigation" (supplemental), *CHJ Consultants (May 2012)*
Appendix H-2	"Slope Stability Investigation" , *CHJ Consultants (February 2011)*
Appendix H-3	"Response to December 2012 SMGB/OMR Review", *CHJ Consultants (January 2013)*
Appendix I-1	"Amended Erosion Control Designs" *Stantec Inc., (April 2009)*
Appendix I-2	Super Creek Quarry Sedimentation Basins Review, *Bulot, Inc.(February 2008)*
Appendix I-3	"Updated Runoff and Sediment Basins Capacities*", Joseph E. Bonadiman & Associates, Inc. January 2013*
Appendix J-1	Description of Biological Resources, *Paul Kielhold (September 2008)* and updated Revegetation Program for Winter of 2008-2009 and Spring 2009, *Paul Kielhold (November 2008)*
Appendix J-2	"Revegetation Report," *Paul Kielhold* (April 2009)
Appendix K	Air Quality Permits
Appendix L	Stormwater Pollution Prevention Plan, *Stantec Inc.* – Updated draft April 2009
Appendix M	Business Plan (includes hazardous material use and waste inventories)
Appendix N	Coachella Valley Multi-Species Habitat Conservation Plan Maps

REVISED PLAN OF OPERATIONS
SUPER CREEK QUARRY EXPANSION

INFORMATION AS REQUIRED BY 43 CFR 3809.401:

(a) Introduction:

Painted Hills Mining Company (Painted Hills) is submitting this revised Plan of Operations and amended Reclamation Plan (Revised Plan) for the expansion and the ongoing reclamation of the existing Super Creek Quarry (CA-47363 & CA-39566). The Super Creek Quarry mines decorative rock and is located approximately 2 miles north of Interstate 10 (I-10), east of the Whitewater River in the far western portion of the City of Desert Hot Springs in Riverside County. Super Creek Quarry site is situated on public lands under the jurisdiction of the Bureau of Land Management (BLM) on placer and lode mining claims controlled by Painted Hills in Section 36, Township 2 South, Range 3 East, SBBM and in assessor's parcel number 514-260-012.

The Super Creek Quarry (previously known as Painted Hills Mine) has been in operation since the 1950s prior to the Surface Mining And Reclamation Act (SMARA) of 1975 (mined lands prior to January 1, 1976 are not subject to SMARA's requirement of a reclamation plan for, or the reclamation of, such lands (Pub. Res. Code Section 2776)). Currently, Painted Hills operates under an approved BLM Plan of Operations and Reclamation Plan No. 137. In addition, Painted Hills holds a Right-of-Way Grant (ROW) for the Super Creek access road (CA-22568 signed in 1993 with a 30-year effective date) that is approximately 15,400 feet in length and 50 feet wide.

This expansion application is to add additional quarry area on two small hilltops just west of the existing quarry operation and additional project areas for the proposed Northwest and Southwest Waste Placement Areas. Currently, operations are located on approximately 23.8 acres and inactive waste material slopes cover approximately 27 acres on the east (see Table 1). Additional areas planned for mining, waste placement areas, and additional sedimentation basins will total approximately 33.4 acres within a total project area of 105.2 acres. Approximately 21 acres will remain undisturbed along the west and south boundaries. The expansion area will provide the required decorative rock product to serve the local market for the upcoming 25 years.

(b) (1) Operator Information:

Painted Hills Mining Company is the owner/operator of the unpatented mining claims that comprise Super Creek Quarry. The contact for purposes of operation and compliance is:

Project Owner/Operator & Point of Contact:	Mr. Allan Bankus, Jr. – President Painted Hills Mining Company 58645 Old Highway 60 Whitewater, CA 92282 760-325-2747

Taxpayer Federal Identification Number: 45-2153756

Legal Description as follows:

Super Creek Quarry site is situated on public lands under the jurisdiction of the Bureau of Land Management (BLM) on 10 placer and lode mining claims controlled by Painted Hills in Section 36, Township 2 South, Range 3 East, SBBM.

- Super Creek Nos. 1 – 7;
- Super Creek Nos. 10 and 11
- Manzanita

(b) (2) Description of Operations

The operations will continue to excavate, crush, sort, and transport decorative rock from the quarry site to a stock yard approximately 3.5 miles to the southwest via a dirt access road with BLM right-of-way (CA-22568). One of their prime products is the Palm Springs Gold variety of decorative rock that Painted Hills and its predecessors has been mining at the Super Creek Quarry for decades. This quarry expansion application is to add additional quarry area on two small hilltops just west of the existing quarry operation and additional project areas for the proposed Northwest and Southwest Waste Placement Areas. Currently, operations are located on approximately 23.8 acres and inactive waste material slopes cover approximately 27 acres on the east (see Table 1 and Sheet 1). Additional areas planned for mining, waste placement areas, and sediment basins will total approximately 33.4 acres within a total project area of 105.2 acres. Approximately 21 acres will remain undisturbed along the west and south boundaries. The expansion area will provide the required decorative rock product to serve the local market for the upcoming 25 years.

Table 1
Existing and Proposed Quarry Areas (acres)
Super Creek Quarry

	Quarry Areas	**Eastern Tailings Slopes (including basins)**	**Undisturbed Areas[1]**	**Total Area**
Current Mine Site	23.8	27	---	50.8
Proposed Expansion	33.4[2]	0	21	54.4
Total Project Area	**57.2**	**27**	**21**	**105.2**

[1] These areas are to the west of the proposed quarry expansion and will not be mined or otherwise impacted, but may experience some boulder roll down. Erosion control methods for the west slope are planned if necessary.
[2] Includes approx. on acre of additional basins and northern pipeline area from the NW Waste Placement Area.

(i) Maps

The Plan of Operations, reclamation plan, and cross section are shown on Sheets 1 through 2 included in full size sheets attached at the back of this report.

Sheet 1 Super Creek Quarry Mine Plan
Sheet 2 Super Creek Quarry Reclamation Plan

(ii) Design and Operations

Mining is described in detail under the heading **Mining**, Sections 1 through 13 starting on page 24 within the Reclamation Plan text and summarized below.

This Plan proposes to continue mining at the quarry expansion area site upon approval of the amended Plan of Operations from the BLM and SMARA Reclamation Plan approval from the SMGB. Mining will then continue for 25 years upon final approvals. The Amended Plan will develop five main features including the following:

- northwest hilltop quarry;
- west central hilltop quarry;
- southeastern pit area;
- Northwest Waste Placement Area; and the
- Southwest Waste Placement Area.

This Plan proposes to add approximately 33.4 acres of additional quarry, waste placement areas, and sediment basins including the two small hilltops just west of the existing quarry operation and additional waste placement areas for a total active mining area of 57.2 acres (see Sheet 1 for the Mine Plan and Table 1 for estimated acreages). Approximately 21 acres along the western and southern boundaries of the site would remain undisturbed. All quarry slopes and waste placement fill slopes have been designed pursuant to the recommendations included within the Slope Stability Investigations prepared by CHJ Consultants (see Appendices H-1, H-2, and H-3).

The East Tailings slopes cover approximately 27 acres along the east side of the project site. Active waste stockpiling ceased in March 2008 and the east slopes will not be used for any further waste material stockpiling. Reclamation of these slopes has been initiated and the slopes will continue to be reclaimed and monitored for erosion for the life of the project as described in this Plan.

This Plan proposes to continue an average annual extraction rate of 50,000 tons (up to 30,000 banked cubic yards (bcy)) per year, including approximately 25,000 tons (16,667 bcy at 1.5 tons per bcy) of waste material. Annual volumes vary due to quality of material, location within the quarry, and product demand. Of the total amount of material extracted each year, approximately 25,000 tons (17,500 loose cubic yards (lcy) with approximately 40% swell factor) of product will be exported from the site. Therefore, the total weight (volume) of material to be extracted over the proposed 25-year project life will be approximately 1.25 million tons (750,000 bcy) including

approximately 625,000 tons (417,000 bcy or 584,000 lcy) of waste material, which will remain onsite in the two designated waste placement areas.

Production from the quarry is determined by the number of truck loads per day transporting product to the stockyard; by annual sales of product; and by aerial surveys of the quarry site conducted as required.

Mining and Processing Operations

Mining operations at this site are accomplished utilizing a standard hillside and open pit method. Due to the rocky nature of the topography there is very little vegetation and overburden to be removed. As the proposed mining expansion area is incrementally expanded, any growth media will be stockpiled at up to three designated topsoil stockpile areas located near the quarry access road for subsequent use in reclamation activities, as shown on Sheet 1. This stockpiled material will be covered with coarse aggregate or planted with a native vegetative cover as needed to prevent wind/water erosion. Any overburden waste rock encountered will be deposited into either the Northwest or Southwest Waste Placement Area, as shown on the attached sheets.

The mining of the decorative rock material is conducted with dozers, excavators and front-end loaders. The material is ripped and pushed into a raw stockpile using an appropriately sized dozer. Front-end loaders or haul trucks then transport the raw material from the raw stockpile(s) to the processing plant. Two small portable crushing and dry screening plants are utilized to process rock at the quarry site. This is the only type of ore processing that is proposed throughout the 25-year life. The existing portable crushing and screening plant equipment consists of a primary jaw crusher and a double-deck screen deck, a cone crusher and a triple-deck screen, and assorted conveyors. The jaw crushing/screening plant is a mobile track-mounted unit that can be relocated to wherever the active excavation area is at any one time.

The raw material is fed through the portable crusher and screened to produce the 3" minus "Palm Springs Gold" raw product. All other material that is produced from the crushing/screening operation is considered waste and will be deposited into one of the two designated waste placement areas. The 3” minus material is processed through a triple-deck screening plant and cone crusher to make the finished products for truck transport to Painted Hills stock yard about 3.5 miles by road to the south. The existing BLM Right-of-Way unpaved haul road will continue to be utilized for access to this quarry site. Chemicals or other hazardous materials are not required during processing of materials at this site. No washing of material is required or proposed.

Mobile equipment currently onsite is listed below. Some of these are back up equipment and some are also utilized at the stock yard adjacent to I-10. This is a typical equipment list and types and models of equipment will change due to replacement of old equipment and compliance with new diesel regulations.

Super Creek Quarry Equipment List (2012)

ID No.	Make/Description
109	GMC C7500 Maintenance Truck
201	Ford Fuel Truck
203	Int'l F5070 Water truck (4000 gal)
207	Int'l 5000 Water Truck (4000 gal)
---	Semi-end dump trucks (2)
408	CAT 988B loader
409	CAT 988B loader
410	CAT 980C loader
412	Volvo L150C loader
500	CAT D9H Crawler tractor (dozer)
501	CAT D8K Crawler tractor (dozer)
510	CAT Generator 3406B (250 KW)
512	CAT 14B Grader
513	CAT 235 Excavator
514	CAT D350E Haul truck
516	CAT 245 Hydraulic excavator
901	CEC Screen Plant 6x16 2-deck
902	CEC Screen plant 6x16 3-deck
903	Mobile crushing plant (jaw crusher)
904	Symons 3-foot cone crusher

Quarry Areas

The new quarry areas will be mined to a maximum depth of approximately 130 feet in the hilltop area and approximately 150 feet in the pit area. The excavations will remove the top portion of two small hills just west, but contiguous to the existing quarry operations. Excavations will follow the desired rock ore body with depth to the east-southeast to form an open pit with 1.2H:1V slopes in bedrock to a depth of 2,125 feet amsl.

The northwestern hill will be mined from approximately 2,355 feet amsl to a quarry elevation of 2,250 feet amsl. The west central hill will be mined from approximately 2,480 feet amsl to a quarry elevation of approximately 6 acres at an elevation of 2,350 feet amsl. From this quarry elevation, slopes will be cut at 3H:1V, gradually steepening to 1.2H:1V to form an irregular shaped pit floor of approximately one acre at 2,125 feet amsl in the southeastern portion of the site (see Cross Section B-B' on Sheet 1). The total acreage of proposed quarry, adjacent Northwest and Southwest Waste Placement Areas, and additional sediment basins will be approximately 57.2 acres.

All proposed excavations will adhere to the recommendations included within the Revised Slope Stability Investigation prepared by CHJ (see Appendices H-1, H-2, and H-3). These mining

slopes are entirely in bedrock with a static factor of safety of over 3 and a seismic factor of safety of over 2 as determined by CHJ.

Waste Placement Areas

The planned Northwest Waste Placement Area will be located on approximately 4 acres with a capacity of approximately 300,000 cy (see Cross Section A-A' on Sheet 1). The waste placement area will be developed with 2H:1V slopes with 10-foot wide benches at 25-foot vertical intervals. The slopes will be protected with water bars and straw wattles with water directed to rock lined down drains. The lower drainage will be detained by a proposed rip-rap dam. No water will be allowed to flow over these slopes. Upon final grading completion, the slopes will then be revegetated per the revegetation plan. (Refer to **Mining** Section 11 and Appendix I-1 for details.)

In the southwestern portion of the site, waste material will be placed in the Southwest Waste Placement Area covering approximately 10 acres with a capacity of approximately 500,000 cy. The existing access road will be realigned as this area is developed. The waste placement area will be constructed with 2H:1V slopes with 10-foot wide benches at 25-foot vertical intervals (see Cross Section D-D' on Sheet 1). The slopes will be protected with water bars and straw wattles with water directed to rock lined down drains. The lower drainage will be detained by a proposed rip-rap dam. No water will be allowed to flow over these slopes. Upon final grading completion, the slopes will then be revegetated per the revegetation plan. (Refer to **Mining** Section 11 and Appendix I-1 for details.)

The two waste placement areas will be constructed in accordance with recommendations included in the "Slope Stability Investigations" in Appendix H-2 under **Proposed Fill Slope Construction** (p. 23) and listed below:

> *The slopes associated with the proposed waste placement/tailings areas are considered stable if the following recommendations are followed. All loose alluvial soils should be removed below the proposed slopes and fill material should be placed, not dumped, and spread evenly in thin lifts with conventional heavy equipment. Moisture content should be at least 7 percent by weight, which is the typical post-plant moisture content of tailings. The addition of water during the placement process should facilitate compaction of the tailings.*
>
> *Our analyses for the proposed tailings slopes are based upon a relative compaction of 85 percent using ASTM D 1557 as a laboratory standard. The as-built tailings materials will generally need to meet or exceed 85 percent relative compaction to satisfy minimum standards for static and seismic slope stability.*
>
> *The on-site soils should continue to provide adequate quality fill material for construction of tailings slopes with minimal compactive effort. These slopes should be constructed no steeper than 2(h):1(v) with 10-foot wide benches at 25-foot vertical intervals to provide adequate safety against static and seismic slope failure.*

The finished fill slopes should be re-vegetated, where practical, with appropriate native, drought-tolerant vegetation.

Equipment Maintenance

The majority of any heavy equipment maintenance will occur offsite at Painted Hills repair facility; however, unplanned repairs or minor maintenance may occur at the quarry site if required. Any waste oil generated at the project site will be collected and transported for offsite disposal by approved methods via properly trained and licensed personnel.

Painted Hills maintains an existing Business Plan, hazardous materials inventory, and a Spill Prevention Control and Countermeasure Plan (SPCC) which include employee training, record keeping, preventive maintenance and Best Management Practices (BMPs). These plans are submitted to the Hazardous Materials Management Division, the Certified Unified Program Agency (CUPA) for Riverside County, responsible for regulating hazardous materials business plans and hazardous waste. Painted Hills would be required to update these plans as necessary to reflect operational changes.

(iii) Water Management Plans

Water management and erosion and sedimentation control plans are discussed extensively in **Mining** Section 11 and illustrated on Figures 3 through 7 and on Sheets 1 and 2. The background report that engineered the erosion control facilities is included as Appendix I-1 ("Amended Erosion Control Designs," Stantec Inc., April 2009) and Appendix I-3 (Updated Run-off and Sediment Basins Capacities", Joseph E. Bonadiman & Associates, Inc., January 2013).

(iv) Rock Characterization and Handling Plans

The decorative rock excavated and processed into salable products is primarily the Palm Springs Gold variety of decorative rock used for landscaping that Painted Hills and its predecessors have been mining at the Super Creek Quarry for decades. The handling of this decorative rock is discussed under Operations above.

(v) Quality Assurance Plans

Quality assurance is conducted visually and sizing of rock through the screens. No other quality assurance is required.

(vi) Spill Contingency Plan

Painted Hills maintains an existing Business Plan, hazardous materials inventory, and a Spill Prevention Control and Countermeasure Plan (SPCC) which include employee training, record keeping, preventive maintenance and Best Management Practices (BMPs) (refer to Appendices L and M). These plans are submitted to the Hazardous Materials Management Division, the Certified Unified Program Agency (CUPA) for Riverside County, responsible for regulating

hazardous materials business plans and hazardous waste. Painted Hills would be required to update these plans as necessary to reflect operational changes.

(vii) Schedule of Operations from Start through Closure

Super Creek Quarry is an ongoing mining operation which will expand onto additional quarry areas following authorization to proceed from the BLM and the SMGB. The general phasing and timeframes are listed below and are dependent on product demand and quality of rock over time.

Phase 1 – Ongoing Excavations; Years 2013 - 2023

- Excavate northwest area and other areas depending on market demand
- Processing and transferring material to sales yard
- Develop Northwest Waste Placement Area
- Sloping, erosion control, and revegetation of Eastern Tailings Slopes and upper quarry slopes as completed in the northwestern quarter of site.

Phase 2 – Ongoing Excavation and Concurrent Reclamation; Years 2024 - 2038

- Excavate west central area and southeastern pit depending on market demand
- Processing and transferring material to sales yard
- Develop Southwest Waste Placement Area
- Sloping, erosion control, and revegetation of Eastern Tailings Slopes and upper quarry slopes as completed in the western half of site.

Phase 3 – Operations Scheduled for Completion; 2038 - 2039

- Mining excavations cease
- All mobile and stationary plant equipment removed from the site except as needed for reclamation
- Final recontouring implemented as required to meet approved design
- Fill sedimentation basins at base of slope and revegetate
- Continue revegetation activities on all quarry areas, including any quarry roads.

Phases 4, 5 and 6 – Final Reclamation after Operations Cease; Years 203 9 – 2048 (or until success criteria are achieved

- Finalize all revegetation activities and remediate revegetation and substantial erosion as necessary.
- Monitor site revegetation until success criteria are met.
- Final reclamation of all remaining un-reclaimed quarry roads on-site.

(viii) Plans for Roads and Services

Access Road - The quarry site is located approximately 2 miles north of the existing building supply retail site located at 58645 Old Highway 60, Whitewater, California (refer to Figure 2). Access is currently, and will continue to be, a dirt and gravel haul road per by an existing 50-foot wide BLM Right-of-Way (CA-22568). The road averages 20 to 25 feet wide and this width is adequate for two trucks to pass each other. There are no specific truck turn-outs. In addition the haul trucks are able to communicate their location to other trucks and mine vehicles. The road is maintained in a safe and usable condition per right-of-way stipulations including blading, ditching, culvert installation and surfacing. Swinging gates are located on the western and eastern road segments about 0.5 miles south of the quarry.

Water is used onsite only for dust suppression activities. These include water spraying roads, active stockpiles, and active mining areas. A 5,000 gallon water tank on-site feeds the water sprays on the screening plant. The amount used varies greatly and is dependent on a variety of factors (i.e. weather conditions, production rate, etc.). Historically, however, less than 4,000 gallons per day (less than 4 acre-feet per year) has been required. All water is acquired via an offsite well located at Painted Hills stock yard 3.5 miles south of the quarry. A water truck transports water to the project site daily as needed. Bottled drinking water is provided for employees and vendors.

Power is supplied by onsite generators permitted through the South Coast Air Quality Management District (SCAQMD). No commercial power or infrastructure is available at the site.

Sewage is contained in portable restrooms. These will be serviced by a commercial provider and removed upon closure. No utility service or infrastructure is available at the site.

(b)(3) Reclamation Plan

In general, physical reclamation procedures will include regrading as necessary to achieve planned slopes, implementing and maintaining erosion control features, roughening the compacted surface to hold moisture, adding any stockpiled surface material containing banked seeds and available silts, seeding with native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance. Reclamation activities will be accomplished concurrently with the planned excavations.

Revegetation will be ongoing during the quarry mining operation once the final slopes and quarry floors have been established. Surface material salvaged for revegetation will be limited due to the surficial rock conditions on-site but where available up to 12 inches will be salvaged. Available material containing the native seed bank will be placed in islands augmented with additional silts and seeding with native species. Roads not needed for site and quarry access will be stripped of any road base material, ripped, covered with available growth media, and revegetated per the revegetation plan.

The reclaimed end use will be open space. A mine reclamation plan in compliance with the California Surface Mining and Reclamation Act (SMARA) is included within this report with reclamation discussed under the heading **Reclamation,** Sections 1-15 starting on page 43. This includes a revegetation plan as Appendix F and updated in Appendices J-1 and J-2. Site reclamation will include the following:

(i) Drill Hole Plugging

There are no drill holes onsite and a drilling program is not included in this plan of operation.

(ii) Regrading and Reshaping (refer to Section 7)

All quarry slopes will be reclaimed to produce stable slopes as recommended in the CHJ Consultants. Slope Stability Investigations (Appendices H-1, H-2, and H-3), reducing the possibility of landslides, earth flows, or rock falls. As depicted on Sheets 1 and 2, all quarry cut slopes will be final graded to no steeper than 1.2H:1V with all waste placement area slopes no steeper than 2H:1V. Grading, as well as the placement of berms at the crest of all project slopes and pursuant to other recommendations in Stantec's "Amended Erosion Control Designs" will prevent adverse drainage from the toe of the fill slopes. To the extent practical, all project slopes that will not be impacted further by excavation and processing activities will be revegetated annually. This annual revegetation procedure, as well as other measures previously described, will inhibit erosion and should effectively stabilize the finished slopes.

Active deposition of waste onto the Eastern Tailings slopes was terminated in March 2008. Reclamation of these slopes to reduce and limit erosion of the fine materials is ongoing. Actions undertaken during the past year which will be monitored, maintained, and remediated as necessary in the future to limit erosion on the slopes include the construction and maintenance of sediment basins at the toe of the slope; placement of rip-rap at toe of slope, reduction of the top of slopes by material removal; erosion control cross terracing; and revegetation.

(iii) Mine Reclamation (refer to **Reclamation,** Sections 1-15)

Reclamation procedures will include regrading as necessary to achieve planned slopes, implementing and maintaining erosion control features, roughening the compacted surface to hold moisture, adding any stockpiled surface material containing banked seeds and available silts, seeding with native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance. Reclamation activities will be accomplished concurrently with the planned excavations.

Revegetation will be ongoing during the quarry mining operation once the final slopes and quarry floors have been established. Surface material salvaged for revegetation will be limited due to the surficial rock conditions on-site but where available up to 12 inches will be salvaged. Available material containing the native seed bank will be placed in islands augmented with additional silts and seeding with native species. Roads not needed for site and quarry access will be stripped of

any road base material, ripped, covered with available growth media, and revegetated per the revegetation plan.

(iv) Riparian Mitigation

There are no riparian areas onsite.

(v) Wildlife Habitat Rehabilitation

Wildlife habitat restoration consists of the overall reclamation and revegetation activities described in this Plan under (iii) above and (vii) below.

Wildlife encountered on the proposed project expansion site and surrounding areas include common birds, reptiles and mammals, none of which are Federally and/or State designated Rare, Threatened or Endangered species. For a more detailed description of wildlife on the expansion area, see the Baseline Biological Survey prepared by Biological Resource Specialists dated January 2005 (Appendix A), 2005 Spring Survey dated August 2005 (Appendix B), and "Description of Biological Resources" dated September 2008 covering the southwest waste placement area and western slope (Appendix J-1).

(vi) Topsoil Handling (refer to Section 12)

Topsoil does not exist throughout the existing active quarry area; however, a thin veneer of topsoil covers portions of the proposed project expansion area. Where suitable topsoil material is present, at least the first 12 inches will be cleared, used for concurrent reclamation if areas available, or stored for reclamation prior to expansion into the new excavation area. This topsoil material will be stockpiled in three storage areas for subsequent revegetation activities as shown on Sheet 1.

(vii) Revegetation (refer to Section 13 and Appendices F, J-1, and J-2)

A revegetation plan is included under the heading **Reclamation,** Section 13 and within Appendices F, J-1, and J-2. In summary, the areas to be reclaimed will be recontoured to final grades, ripped to a depth of at least one-foot along the contour, covered in island patterns with available stockpiled topsoil material, and tilled to leave a rough surface. Broadcast seeding (refer to Table 5 for the proposed seed mix) will then occur over the prepared surfaces utilizing only seeds and seeding rates that have proven successful in the revegetation test plots. Seeding will take place between November and January to take advantage of winter precipitation and eliminate the need for irrigation. Reclaimed areas will be clearly staked and flagged to eliminate additional disturbance from ongoing operations. Annual monitoring and remediation as needed will be conducted and continue until the success criteria are achieved (see Monitoring section below).

(viii) Isolation and Control of Acid Forming, Toxic or Deleterious Materials

All rock products and waste rock are naturally occurring rock. Chemicals or other hazardous materials are not utilized or produced during processing of materials at this site.

(ix) Removal or Stabilization of Structures

All clean-up operations will be conducted within one year of the termination of mining estimated for 2038. Project equipment not required for final reclamation activities will be removed from the site. Scrap material, refuse, unwanted equipment, and surplus materials will be removed and disposed of at an appropriate landfill site. Process plant facilities and equipment will be removed from the site. This will include dozers, loaders, crushing and screening plant, conveyors, etc. Refuse in any form will not remain on the project site and will be appropriately disposed of in a permitted landfill. Excess material piles and disturbed areas will be regraded for positive drainage, scarified, and revegetated. The BLM right-of-way access under CACA 22568 will be left in-place unless otherwise directed by the BLM.

(x) Post-Closure Management

Mine reclamation/revegetation will be monitored as discussed below following final reclamation and revegetation annually until success criteria are met. Remediation of revegetated areas such as weeding and reseeding with different seed mixes will be conducted as necessary. This will result in formal closure and release of reclamation bonds.

(b)(4) Monitoring Plans

The following operation reviews and reclamation monitoring procedures are conditions of project approval in compliance with local, state and federal laws and regulations authorizing operation. The following monitoring procedures apply (also refer to **Reclamation,** Section 14, **page 43**):

Reclamation and Revegetation (refer to Sections 14 b and c): Painted Hills will be responsible for the maintenance program in accordance with BLM to insure the success of the reclamation program. Throughout the life of the project, Painted Hills will continue to submit annual Mining Operation Reports to the SMGB and the BLM, as required by amendments to SMARA. The annual monitoring reports will assess existing conditions on-site including revegetation efforts, slope erosion, drainage controls, and safety measures and will provide recommendations to improve and /or remediate any deficiencies in these areas.

Monitoring of revegetation activities will occur annually during operations and following cessation of mining activities, until the established success criteria is met beginning one year after initial seeding or planting at any one site. Annual monitoring will include random transect sampling within revegetation areas. The number of transects and plots will vary in order to produce the 80% confidence level required under SMARA's Performance Standards for Revegetation. The following data will be collected within transects and plots:

a. Survivorship: assessed by absolute counts
b. Plant density
c. Species richness or diversity
d. Cover per specified area

All data will be recorded on a standard form and copies will be submitted as an appendix to each Annual Report. Photos will also be taken for representative transects in order to visually document annual vegetation changes and community development. Monitoring reports will be produced annually summarizing the monitoring results, recommending any required remedial action (e.g. weed removal, reseeding, or erosion control), and evaluating whether the revegetation project is trending toward success as outlined in the Revegetation Plan. Once revegetation success criteria are met, a final report will be prepared confirming attainment of successful revegetation as specified in the Revegetation Plan. All monitoring reports will be furnished to the BLM and SMGB for review.

Air Quality: The site's processing and power equipment are and will be operated under a permit to operate from the SCAQMD (see Appendix K). Operations and permits are inspected and renewed annually. Haul trucks and diesel equipment must meet requirements of the California Air Resources Board's off-road diesel vehicles regulations to reduce diesel pollutants. Operations are required to comply with SCAQMD Rules 401 (limiting visible emissions from exhaust); 402 (avoid nuisance emissions); and 403 (overall fugitive dust control requirements).

Surface Water Protection (refer to Section 14d): The proposed inspection and maintenance procedures as well as the proposed erosion and sedimentation controls, have been incorporated into the Site's updated SWPPP (see Appendix L) and listed in Section 14 (d). Monitoring of slopes, erosion control, revegetation and safety measures will also be accomplished by BLM and SMGB staff as part of their annual SMARA inspection and reporting.

Annual Slope Stability Monitoring (refer to Sections 14e & f): A registered professional engineer or geologist will observe the heights and inclinations of all on-site slopes with respect to the mining and reclamation plan requirements. This observation would include an assessment of whether the slopes are within the permitted boundaries. Evidence for instability observed, such as tension cracks, deep-seated failures, shallow failures (including soil-slip type failures and rockfalls/toppling), and areas of significant erosion will be noted. Recommendations for mitigation of significant slope failure concerns would be included. Such measures could include removal of overburden, buttressing, slope flattening, slope removal, manual or equipment-based scaling of loose boulders, and minor re-grading to re-direct surface water flows. If a potential hazard to people or equipment is observed, then recommendations for protection of people and equipment will be provided. A report would be prepared that documents the site observations, potential slope stability concerns, and recommended mitigation, if any, and included in the overall annual report.

In order to verify assumptions with regards to strength parameters utilized in slope stability calculations for the Eastern Tailings Slopes, additional testing of tailings slope materials will be conducted prior to establishment of final slopes locations. Specifically, additional tailings

material sampling and strength testing will be conducted by a qualified professional when the quarry floor reaches elevation 2,150 feet. Samples will be collected from materials undisturbed by post-2008 mining as shown on cross-section B-B', Sheet 1 of the Plan. The results of such confirmation slope stability testing should be documented in a final slope stability report, and if changes to the Eastern Tailings Slope design are warranted, then the reclamation plan will be amended as required.

Hazardous Materials: Chemicals or other hazardous materials are not utilized or produced during processing of materials at this site, nor are any proposed for future use. Painted Hills maintains an existing Business Plan, hazardous materials inventory, and a SPCC which include employee training, record keeping, preventive maintenance and BMPs. These plans are submitted to the Hazardous Materials Management Division, the Certified Unified Program Agency (CUPA) for Riverside County, responsible for regulating hazardous materials business plans and hazardous waste. Painted Hills would be required to update these plans as necessary to reflect operational changes.

Financial Assurance: A current financial assurance mechanism is in place to cover reclamation of all existing land disturbance (see Attachment 2 for the current Irrevocable Letter of Credit dated May 18, 2012 for the currently approved financial assurance and Appendix G for the financial assurance cost estimate (FACE). Prior to commencement of the proposed project expansion activities, an updated FACE and a financial assurance mechanism will be approved by the BLM and SMGB to guarantee proper and thorough reclamation of any additional disturbance on the project site. This assurance will be reviewed and adjusted as needed on an annual basis.

(b)(5) Interim Management Plan

An Interim Management Plan is provided in Attachment 3.

(c) Baseline Environmental Information:

The following baseline environmental reports are included:

Biological Resources

Appendix A Baseline Biological Survey, *Biological Resource Specialists (January 2005)*

Appendix B 2005 Spring Survey, *Biological Resource Specialists (August 2005)*

Appendix J-1 Description of Biological Resources, *Paul Kielhold (September 2008)* and updated Revegetation Program for Winter of 2008-2009 and Spring 2009, *Paul Kielhold (November 2008)*

Appendix J-2 "Revegetation Report," *Paul Kielhold* (April 2009)

Cultural Resources

Appendix C Identification and Evaluation of Historic Properties, *CRM Tech (September 2004)*

Appendix D Addendum to Historical/Archaeological Survey Report, *CRM Tech (November 2006)*

Visual Resources

Appendix E Visual Impact Analysis, *Webber & Webber Mining Consultants, Inc. (December 2004)*

Geological Resources and Slope Stability

Appendix H-1 "Slope Stability Investigation" (supplemental), *CHJ Consultants (May 2012)*
Appendix H-2 "Slope Stability Investigation" , *CHJ Consultants (February 2011)*
Appendix H-3 "Response to December 2012 SMGB/OMR Review", *CHJ Consultants (January 2013)*

Hydrology and Erosion Control

Appendix I-1 "Amended Erosion Control Designs" *Stantec Inc., (April 2009)*
Appendix I-2 Super Creek Quarry Sedimentation Basins Review, *Bulot, Inc. (February 2008)*
Appendix I-3 "Updated Hydrology, Run-off, and Basin Capacities Calculations" *Joseph E. Bonadiman & Associates, Inc., January 2013*

Appendix L Stormwater Pollution Prevention Plan, *Stantec Inc.* – Updated draft April 2009

(d) Reclamation Cost Estimate:

A current financial assurance mechanism in the form of an Irrevocable Letter of Credit (May 18, 2012) is in place to cover reclamation of all existing land disturbance (see Attachment 2 and Appendix G for the financial assurance cost estimate (FACE)). Prior to commencement of the proposed project expansion activities, an updated FACE and a financial assurance mechanism will be approved to guarantee proper and thorough reclamation of any additional disturbance on the project site. This new assurance mechanism will be reviewed by the BLM and will comply with Section 2773.1 of SMARA. This assurance will be reviewed and adjusted as needed on an annual basis.

AMENDED RECLAMATION PLAN

SITE AND AREA CHARACTERISTICS

1. **ACCESS:** The active quarry site is located approximately 2 miles north of the existing building supply retail site located at 58645 Old Highway 60, Whitewater, California (see Figures 1 and 2). Access is currently, and will continue to be, provided by an existing BLM Right-of-Way (CA-22568) dirt haul road. This haul road has a locking swing gate approximately ½ mile south of the Super Creek Quarry.

Project Owner/Operator: Mr. Allan Bankus, Jr. - President
Painted Hills Mining Company
58645 Old Highway 60
Whitewater, CA 92282

Project Representative: Mr. Martin Derus
Lilburn Corporation
1908 Business Center Drive
San Bernardino, CA 92408

2. **UTILITIES:** Water will continue to be imported to the quarry site via 4,000 gallon water truck from an offsite water vendor for dust suppression activities only. No wells or water systems are proposed. Sewage disposal will continue to be accommodated through the use of portable toilets that are regularly maintained by a local sewage disposal service. Electrical service for the existing crushing/screening plant is provided by an onsite diesel generator permitted with the South Coast Air Quality Management District (SCAQMD) (PTO #D30726).

3. **LAND USE:** The current use of this public-owned land is mining of decorative rock reserves using the following methods: open pit, hill top, multi-bench and side hill. The BLM is the federal agency responsible for the management of these public lands. The existing quarry site has been disturbed by ongoing mining activities; however, the proposed quarry expansion areas are mostly undisturbed.

The area was annexed into the City of Desert Hot Springs in 2001. That City's General Plan designates the site as Open Space/Mountain Reserve (OS/MR) and the areas to its south as Industrial Energy-Related (I-E) where numerous wind mills are located.

File: F1and F2 PHMC-Reg Loc.CDR (TAG) Page:1 REV: 10/19/2012

0 5.25
Mile

Source: World Topo Map, 2012

LILBURN CORPORATION

LEGEND

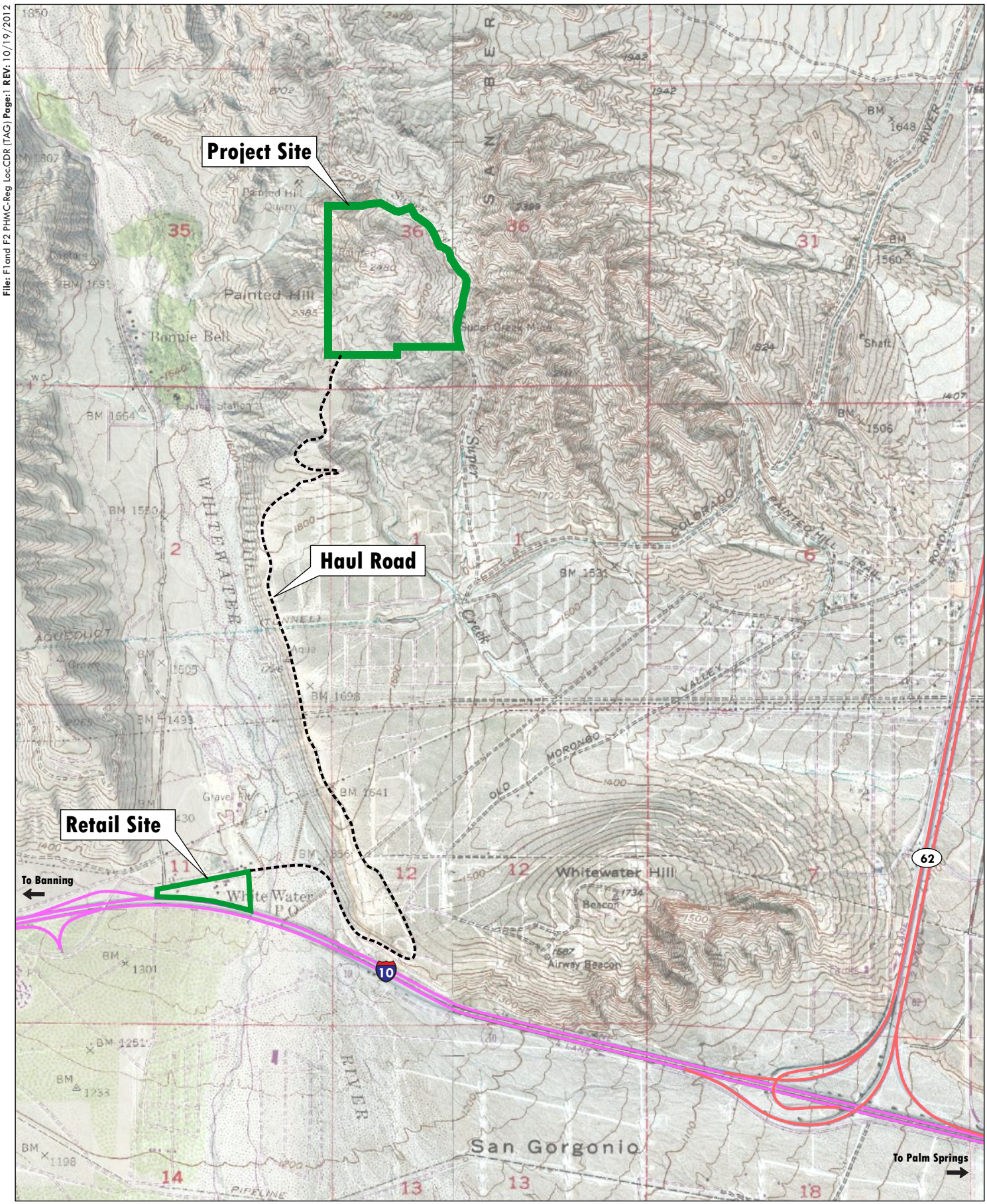
- **Project Site Location** (Geographic Location)
  Lat/Lon: 33° 57' 9.4827" N, 116° 37' 45.2692" W

REGIONAL LOCATION

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 1

File: F1and F2 PHMC-Reg Loc.CDR (TAG) Page:1 REV: 10/19/2012



N

0 2500

FEET

Source: LILBURN CORP., 2012

LILBURN CORPORATION

PROJECT VICINITY

SUPER CREEK QUARRY

Painted Hills Mining Company

San Bernardino County, California

FIGURE 2

The Super Creek Quarry site is situated on up to 10 placer and lode mining claims controlled by Painted Hills in Section 36, Township 2 South, Range 3 East, SBBM. The claims' boundaries are shown on the attached Topographic Survey map prepared and stamped by Massaro & Welch (November 2007) and Sheet 1. Elevations onsite range from approximately 2,000 feet above mean sea level (amsl) in the southeast corner of the site to approximately 2,450 feet amsl on the hilltop in the west central area.

The Whitewater River is situated approximately ½-mile to the west in a canyon at approximately 1,700 feet amsl. Numerous wind turbines used to generate electricity are located south and east of the project site along the access road. The nearest residence to the quarry is located approximately 1-mile to the southwest on Whitewater Canyon Road that leads north to the now-defunct Whitewater Trout Farm.

4. **VISIBILITY:** The project site is located in a fairly remote portion of Riverside County, situated on a hilltop approximately 2½ miles north of I-10. Due to the elevation difference between the proposed quarry (~2,350 feet amsl) and I-10 (~1,300 feet amsl), visibility of the project site from the nearby I-10 corridor is virtually impossible. Further to the east, however, the project becomes visible from the I-10 freeway. Approximately 10-20 miles east of the site, the project can be seen as a small, light-colored form situated near the top of the regional hills. From this distance, however, details of the working operation are impossible to discern with the naked eye. There are no residences, commercial developments or recreation areas to the north, east or west that contain this project within its viewshed.

5. **GEOLOGY:** The project site is located in the lower elevations of the southeastern reaches of the San Bernardino Mountain Range. The regional topography is in a youthful stage of development characterized by rugged terrain with very steep slopes exceeding 1H:1V (horizontal:vertical) and high stream gradients. Underlying the site is a Precambrian igneous and metamorphic rock complex composed of magmatic gneiss, flaser gneiss, and piemontite-bearing gneiss intruded by pegmatite dikes. All overburden materials are composed of sands, silts, clays, etc. in a very thin layer (~12 inches) over the underlying strata.

The proposed quarry excavations will continue down to about the 2,125-foot amsl elevation in an open pit in the eastern portion of the site. The proposed expansion area excavations will mine the hilltops down to a minimum elevation of 2,350 feet and 2,250 feet amsl. The material mined is a brownish/red/gold metamorphic rock for the decorative rock market. Experience from past mining at the Super Creek Quarry indicates the thickness of the proposed mine site ore body is up to several hundred feet.

The mining site is located less than ½ mile north of the east-west trending Banning Fault. Mining operations at this site should not be adversely affected in any manner by earthquake related phenomenon such as ground shaking, landslides, mudflows, liquefaction or settlement due to the lack of proposed permanent structures on the project site.

6. HYDROLOGY:

Surface Water

The existing project site is located in the upper reaches of the foothills in the southeastern San Bernardino Mountains. The general topography in the immediate area is very rocky and rugged in nature. The present drainage system of the existing quarry project is self-contained, with the quarry pit acting as a retention area. The proposed quarry expansion area will also incorporate a self-contained drainage system. Grade control berming and a controlled drainage system will prevent water from flowing directly over the proposed Northwest and Southwest Waste Placement Areas slopes. The existing eastern tailings/waste slopes will also be protected from downslope flows by the interior drainage grading and berming along the rim. Offsite precipitation flows drain to the Whitewater River watershed area to the west or to Super Creek to the east. The revised Stormwater Pollution Prevention Plan (SWPPP) (see Appendix L) provides measures and monitoring procedures that will prevent the possibility of adverse effects on adjacent properties and drainages throughout the project life.

The site is not located in a recognized floodway, 100-year flood plain, or subject to flash flooding. If a locally severe storm occurred directly over the project site, water would be retained within the quarry areas. Therefore, additional methods to protect the project and adjacent properties from intensified flooding are not proposed.

The site is not within a groundwater recharge area; however, drainage west of the project area drains to the Whitewater River, which is a groundwater recharge area. The operation will not introduce any toxic substances, contaminates, or degrade the quality of stream runoff from the site. A stream gauging station exists approximately ½ mile to the west of the site (in the Whitewater River); however, this station will not be affected in any way due to the proposed operations.

Super Creek is a dry channel that extends from its watershed approximately 0.25 miles north of the project site, flows generally south out of the hills to its alluvial fan approximately 0.75 miles south of the project area. From there, Super Creek tends to fan eastward into numerous channels and is impacted by numerous roads related to the densely developed wind farms located throughout its length south of the project area before reaching I-10.

The Super Creek watershed is within the Coachella Valley Multi-Species Habitat Conservation Plan (CVMSHCP) area prepared under the Coachella Valley Association of Governments (CVAG) in 2008 (http://www.cvmshcp.org/). The CVMSHCP is a regional multi-agency conservation plan that provides for the long-term conservation of ecological diversity in the Coachella Valley region of Riverside County. The conservation plan protects over 240,000 acres of open space and 27 species. The CVMSHCP provides a regional vision for balanced growth to meet the requirements of federal and state endangered species laws. The California Department of Fish and Game (CDFG) issued the Natural Community Conservation Plan (NCCP) Permit for the CVMSHCP on September 9,

2008. The U.S. Fish and Wildlife Service (USFWS) issued the federal permit on October 1, 2008, completing a planning process that was initiated in 1996.

The MSHCP Reserve System has been established from lands within 21 Conservation Areas to ensure the conservation of the covered species and natural habitats and communities. For each Conservation Area, Conservation Objectives are articulated for conserving core habitat for covered species, essential ecological processes necessary to maintain habitat viability, biological corridors and linkages as needed, and the less common conserved natural communities. The Super Creek watershed is within the Upper Mission Creek/Big Morongo Canyon Conservation Area as shown in Figure 4-12a from the CVMSHCP (see Appendix N).

Adjacent to and east and south of the project site, Super Creek is a dry wash area with typical creosote bush scrub vegetation. No sensitive habitats of Desert dry wash woodland or riparian forest areas are located within the drainage as evidenced in the field and as shown on Figure 4-12c in Appendix N from the CVMSHCP. Note other drainages on this figure to the north and northeast which do exhibit dry wash woodland habitat areas along their lengths.

The CVMSHP also describes "essential ecological processes" occurring in this area. The areas of the mine and to the south to I-10 are defined as a sand source and Super Creek is shown as providing sand transport (see Figure 4-12d in Appendix N). This region is highly erosive and sediment transport from the hills into Super Creek and other drainages during rainfall events and its transport into the Banning Pass and Whitewater River is a natural part of the hydro-geomorphic process. The sand and sediments eroded from the hills and transported by these fluvial processes is a very important source for blowsand, which is deposited in a broad area below the San Andreas Fault. Strong winds carry and deposit the sediment eastward to the existing Willow Hole Preserve and to the Whitewater Floodplain Preserve to form a unique blowsand habitat that is habitat for many listed and sensitive species including the threatened Coachella Valley fringe-toed lizard (*uma inorata*) (CVMSHCP Plan, CVAG, 2008). Based on the above information from the CVMSHCP, the principal function of Super Creek is related to the transport of sediment and sands for eventual wind transport to sensitive blowsand habitat areas, not for its wash habitat which is not evident.

The mine activities, the erosion control sedimentation basins, and the access road have not directly altered the streambed, impacted any sensitive habitat as there is known, or hindered its ability to transport sediment and sand downstream. Possible past offsite sedimentation and its possible impacts would not be possible to discern due to the natural erosion from the surrounding hillsides and the Pre-SMARA slopes. Mitigation to somehow remove an unknown amount of sediment and whether such sediment is natural or from the post-SMARA slopes is not feasible. The static and seismic slope stability calculations by CHJ utilizing the strengths obtained during the 2012 large-scale remolded shear testing yield stable slopes for the purposes of reclamation under SMARA. These calculations addressed potential failure surfaces, both shallow and deep. No additional measures with respect to deep-seated slope stability are necessary for reclamation of existing tailings slopes.

Erosion from the existing tailings slopes into the Super Creek drainage will be limited by the existing and additional control measures and the monitoring and maintenance of these control measures. Sediment is not expected to impact the creek with implementation of these control measures. In addition, even if some additional sediment were to enter the adjacent drainages, there is no sensitive habitat to impact and resulting transport of sediment to downwind sensitive blowsand habitat that is being preserved under the CVMSHP's Upper Mission Creek/Big Morongo Canyon Conservation Area would be similar to the ecological processes occurring naturally in the area.

Groundwater

Groundwater in the area of this existing project site has been determined to be at the elevation of approximately 1,000 feet amsl, or about 1,125 feet below the minimum quarry elevation of 2,125 feet amsl. There are no known barriers or restrictions to groundwater subsurface flow within the project site area. Water will continue to be imported to the site, therefore, groundwater will not be pumped by wells for use on, around, or downstream of the site.

7. **SOILS:** There is no topsoil on the existing quarry area, and very little on the proposed expansion area. It is estimated that about 25 percent of the new 32 acres may have available growth material of about 13,000 cy. Topsoil that does exist is composed of sands, silts and clays in a very thin veneer of less than 12 inches thick. The top 12 inches of this growth media will be salvaged from undisturbed areas not composed of hard rock and stored in clearly identified separate stockpiles. When possible, the surface material will be immediately utilized for ongoing revegetation efforts. Stockpiles of topsoil (see Sheet 1) will be covered with coarse aggregate, planted with vegetative cover, or applied with magnesium-chloride (or equivalent) for protection from wind/water erosion, when necessary.

8. **VEGETATION:** The existing vegetation on and around the proposed project expansion site is relatively sparse due to the rocky / rugged nature of the terrain and consists primarily of common grasses and small bushes. The most prevalent plant species occurring onsite include: Buckwheat bush (*Eriogonum fasciculatum*), California sagebrush (*Artemisia california*), Brittlebush (*Encelia farinosa*), and Burro bush (*Ambrosia dumosa*).

   For a more detailed description of existing vegetation on the expansion area, see the "Baseline Biological Survey" prepared by Biological Resource Specialists dated January and August 2005 (Appendices A and B), and "Description of Biological Resources" dated September 2008 covering the southwest waste placement area and western slope (Appendix J-1).

9. **WILDLIFE:** Wildlife encountered on the proposed project expansion site and surrounding areas includes only birds, reptiles and mammals, none of which are Federally and/or State designated Rare, Threatened or Endangered species.

For a more detailed description of wildlife on the expansion area, see the Baseline Biological Survey prepared by Biological Resource Specialists dated January 2005 (Appendix A), 2005 Spring Survey dated August 2005 (Appendix B), and "Description of Biological Resources" dated September 2008 covering the southwest waste placement area and western slope (Appendix J-1).

MINING

1. **MINERAL COMMODITY:** The mineral commodity currently mined at the Super Creek Quarry site is a type of decorative rock named "Palm Springs Gold." This decorative rock material has been mined almost continuously since the 1950s. This material is a brownish/red/gold, high-silica metamorphic rock. No other mineral commodities are to be mined at this site.

2. **MINING OPERATION:** This Plan proposes to continue mining at the quarry expansion area site upon approval of the new Plan of Operations from the BLM and SMARA Reclamation Plan approval from the SMGB. It is estimated the mining will then continue for 25 years upon final approvals. The plan will develop five main features including the following:

   - northwest hilltop quarry;
   - west central hilltop quarry;
   - southeastern pit area;
   - Northwest Waste Placement Area; and the
   - Southwest W
   - aste Placement Area..

   This Plan proposes to add approximately 33.4 acres of additional quarry, waste placement areas, and sediment basins including the two small hilltops just west of the existing quarry operation and additional waste placement areas for a total active mining area of 57.2 acres (see Sheet 1 for the Mine Plan and Table 1 for estimated acreages). Approximately 21 acres along the western and southern boundaries of the site would remain undisturbed. All quarry slopes and waste placement fill slopes have been designed pursuant to the recommendations included within the Slope Stability Investigations prepared by CHJ Consultants (see Appendices H-1, H-2, and H-3).

   The East Tailings Slopes cover approximately 27 acres along the east side of the project site. This area incorporates small areas previously outside the 1978 Reclamation Plan boundary. Active waste stockpiling ceased in March 2008 and the east slopes will not be used for any further waste material stockpiling. Reclamation of these slopes has been initiated and the slopes will continue to be reclaimed and monitored for erosion for the life of the project as described in this Plan.

   The new quarry area will be mined to a maximum depth of approximately 130 feet in the hilltop area and approximately 150 feet in the pit area. The excavations will remove the top portion of two small hills just west, but contiguous to the existing quarry operations. Excavations will follow the desired rock ore body with depth to the east-southeast to form an open pit with 1.2H:1V slopes in bedrock to a depth of 2,125 feet amsl.

   The northwestern hill will be mined from approximately 2,350 feet amsl to a quarry elevation of 2,250 feet amsl. This area will also be utilized for the Northwest Waste

Placement Area of approximately 4 acres with a capacity of approximately 300,000 cy (see Cross Section A-A' on Sheet 1). The waste placement area will be developed with 2H:1V slopes with 10-foot wide benches at 25-foot vertical intervals.

The two waste placement areas will be constructed in accordance with recommendations included in the "Slope Stability Investigations" in Appendix H-2 under **Proposed Fill Slope Construction** (p. 23) and listed below:

> *The slopes associated with the proposed waste placement/tailings areas are considered stable if the following recommendations are followed. All loose alluvial soils should be removed below the proposed slopes and fill material should be placed, not dumped, and spread evenly in thin lifts with conventional heavy equipment. Moisture content should be at least 7 percent by weight, which is the typical post-plant moisture content of tailings. The addition of water during the placement process should facilitate compaction of the tailings.*
>
> *Our analyses for the proposed tailings slopes are based upon a relative compaction of 85 percent using ASTM D 1557 as a laboratory standard. The as-built tailings materials will generally need to meet or exceed 85 percent relative compaction to satisfy minimum standards for static and seismic slope stability.*
>
> *The on-site soils should continue to provide adequate quality fill material for construction of tailings slopes with minimal compactive effort. These slopes should be constructed no steeper than 2(h):1(v) with 10-foot wide benches at 25-foot vertical intervals to provide adequate safety against static and seismic slope failure.*
>
> *The finished fill slopes should be re-vegetated, where practical, with appropriate native, drought-tolerant vegetation.*

The slopes will be protected with water bars and straw wattles with water directed to rock lined downdrains into a detention basin at its base. No water will be allowed to flow over these slopes. The existing access road will be realigned as this stockpile is developed. Upon final grading completion, the slopes will then be revegetated per the revegetation plan. (Refer to Section 11 and Appendix I-1 for erosion control details.)

The west central hill will be mined from approximately 2,480 feet amsl to a quarry elevation of approximately 6 acres at an elevation of 2,350 feet amsl. From this quarry elevation, slopes will be cut at 3H:1V, gradually steepening to 1.2H:1V to form an irregular shaped pit floor of approximately one acre at 2,125 feet amsl in the southeastern portion of the site (see Cross Section B-B' on Sheet 1).

In the southwestern portion of the site, waste material will be placed in the Southwest Waste Placement Area covering approximately 10 acres with a capacity of approximately 500,000 cy. The existing access road will be realigned as this stockpile is developed. The

waste placement area will be constructed as listed above with 2H:1V slopes with 10-foot wide benches at 25-foot vertical intervals (see Cross Section D-D' on Sheet 1). The slopes will be protected with water bars and straw wattles with water directed to rock lined downdrains. The lower drainage will be detained by a proposed rip-rap dam. No water will be allowed to flow over these slopes. Upon final grading completion, the slopes will then be revegetated per the revegetation plan. (Refer to Section 11 and Appendix I-1 for details.)

Mining operations at this site are accomplished utilizing a standard hillside and open pit method. Due to the rocky nature of the topography there is very little vegetation and overburden to be removed. As the proposed mining expansion area is incrementally expanded, any growth media will be stockpiled at up to three designated topsoil stockpile areas located near the quarry access road for subsequent use in reclamation activities, as shown on Sheet 1. This stockpiled material will be covered with coarse aggregate or planted with a native vegetative cover as needed to prevent wind/water erosion. Any overburden waste rock encountered will be deposited into either the northwest or southwest waste placement area, as shown on the attached sheets.

The mining of the decorative rock material is accomplished with dozers, excavators and front-end loaders. The material is ripped and pushed into a raw stockpile using an appropriately sized dozer. Front-end loaders or haul trucks then transport the raw material from the raw stockpile(s) to the jaw crusher. The raw material is then fed through the portable crusher and screened through a double-deck screen to produce the 3" minus "Palm Springs Gold" raw product. All other material that is produced from the crushing/screening operation is considered waste and will be deposited into one of the two designated waste placement areas. The 3" minus material is processed through a triple-deck screening plant and cone crusher to make the finished products for truck transport to the stock yard about 3.5 miles by road to the south. The existing BLM Right-of-Way unpaved haul road will continue to be utilized for access to this quarry site.

3. **PROJECT LIFE:** The quarry design of the proposed expansion area will provide enough decorative rock reserves to continue extractions at an annual rate of 50,000 tons (approx. 30,000 bcy) over a 25-year time span. This quarry expansion is expected to commence in 2013, upon approvals by the BLM and the SMGB. It is proposed to continue mining operations for 25 years, ceasing excavation activities on December 31, 2038. Final reclamation and monitoring will then continue for 5 additional years, until December 31, 2043 or when revegetation goals are achieved.

4. **SIZE:** This plan proposes a total project area of 105.2 acres, including the existing quarry and waste placement areas.

5. **EXCAVATIONS:** All proposed excavations will adhere to the recommendations included within the Revised Slope Stability Investigation prepared by CHJ (see Appendices H-1 and H-2). This Plan proposes to continue mining the decorative rock reserves onsite using a basic hillside and open-pit method. Excavations will begin hilltop mining in the proposed quarry expansion area. Both the existing quarry area and the proposed expansion area will be mined concurrently as needed to provide required decorative rock material based on

quantity and quality for blending and demand. Mining will begin at the top and continue down until the proposed quarry floor elevations are achieved. The maximum depth of mining in the expansion area will be approximately 150 feet. Quarry slopes (no benching is proposed) will be excavated to no steeper than 1.2H:1V around the pit. These slopes are entirely in bedrock with a static factor of safety of over 3 and a seismic factor of safety of over 2 as determined by CHJ.

Loose boulders encountered during mining shall be removed from slope faces with on-site equipment. Unstable boulders left on slope faces above working benches shall either be manually removed or, if accessible, removed by equipment. In the unlikely event that boulder removal should trigger larger area of observed instability, the engineering geologist should be notified so that the hazard can be evaluated. People and equipment should be protected from any toppling boulder hazards.

The northwestern hill will be mined from approximately 2,350 feet amsl to a quarry elevation of 2,250 feet amsl. The west central hill will be mined from approximately 2,480 feet amsl to a quarry elevation of approximately 6 acres at an elevation of 2,350 feet amsl. The total acreage of proposed quarry, adjacent Northwest and Southwest Waste Placement Areas, and additional sediment basins will be approximately 57.2 acres.

6. **ANTICIPATED PRODUCTION OF COMMODITY and WASTE MATERIAL:** This Plan proposes to continue an average annual extraction rate of 50,000 tons (up to 30,000 bcy) per year, including approximately 25,000 tons (16,667 bcy at 1.5 tons per bcy) of waste material. Annual volumes vary due to quality of material, location within the quarry, and product demand. Of the total amount of material extracted each year, approximately 25,000 tons (17,500 lcy) with approximately 40% swell factor of product will be exported from the site. Therefore, the total weight (volume) of material to be extracted over the proposed 25-year project life will be approximately 1.25 million tons (750,000 bcy) including approximately 625,000 tons (417,000 bcy or 584,000 lcy) of waste material, which will remain onsite in the two designated waste placement areas.

7. **PLANNED ORE PROCESSING METHODS ONSITE:** Presently, two small portable crushing and dry screening plants are utilized to process rock at the quarry site. This is the only type of ore processing that is proposed throughout the 25-year life. The existing portable crushing and screening plant equipment consists of a primary jaw crusher and a double-deck screen deck, a cone crusher and a triple-deck screen, and assorted conveyors. The jaw crushing/screening plant is a mobile track-mounted unit that can be relocated to wherever the active excavation area is at any one time. Typically, a front-end loader and/or excavator are used to excavate and deposit raw decorative rock material directly into the plant. The crushed rock is then screened within the unit to generate typically ½ inch to 3 inch rock. The final process goes through the triple-deck plant to produce the final three products (1/4”, 1/2", and 1”). No washing of material is required or proposed. A small stockpile area is used to load the processed rock into haul trucks for transport to the Painted Hills stock yard approximately 3.5 miles south of the quarry by road.

Mobile equipment currently onsite are listed below. Some of these are back up equipment and some are also utilized at the Painted Hills stock yard adjacent to I-10. This is a typical equipment list and types and models of equipment will change due to replacement of old equipment and compliance with new diesel regulations.

Super Creek Quarry Equipment List (2012)

ID No.	Make/Description
109	GMC C7500 Maintenance Truck
201	Ford Fuel Truck
203	Int'l F5070 Water truck (4000 gal)
207	Int'l 5000 Water Truck (4000 gal)
---	Semi-end dump trucks (2)
408	CAT 988B loader
409	CAT 988B loader
410	CAT 980C loader
412	Volvo L150C loader
500	CAT D9H Crawler tractor (dozer)
501	CAT D8K Crawler tractor (dozer)
510	CAT Generator 3406B (250 KW)
512	CAT 14B Grader
513	CAT 235 Excavator
514	CAT D350E Haul truck
516	CAT 245 Hydraulic excavator
901	CEC Screen Plant 6x16 2-deck
902	CEC Screen plant 6x16 3-deck
903	Mobile crushing plant (jaw crusher)
904	Symons 3-foot cone crusher

8. PRODUCTION WATER DATA: Water is used onsite only for dust suppression activities. These include water spraying roads, active stockpiles, and active mining areas. A 5,000 gallon water tank on-site feeds the water sprays on the screening plant. The amount used varies greatly and is dependent on a variety of factors (i.e. weather conditions, production rate, etc.). Historically, however, less than 4,000 gallons per day (less than 4 acre-feet per year) has been required. All water is acquired via an offsite well located at Painted Hills stock yard 3.5 miles south of the quarry. A water truck transports water to the project site daily as needed. Bottled drinking water is provided for employees and vendors.

9. MINE WASTES: The only type of mine waste produced onsite is the tailings/waste rock material produced from the crushing/screening operation, defined as less than ½" in size. This waste material includes pebbles, sand, silts and clays. Past mining activities at the quarry site has shown the waste to comprise up to 50 percent of total production(which can vary), or about 25,000 tons per year. The total weight (volume) of waste material to be extracted over the proposed 25-year project life will be approximately 625,000 tons

(417,000 bcy or 584,000 lcy with swell factor), which will remain onsite in the two designated waste placement areas.

This waste material has historically been deposited onto the eastern quarry slope adjacent to Super Creek. This practice was terminated in March 2008. This Plan provides for two designated waste placement areas where all future material will be placed: the Northwest Waste Placement Area of approximately 4 acres and the Southwest Waste Placement Area covering approximately 10 acres. The design of these two stockpiles is discussed under Section 2 above and erosion control plans are discussed under Section 11 below.

10. IMPORTED WASTE: Chemicals or other hazardous materials are not required during processing of materials at this site. The only hazardous materials to be imported to this site are the diesel fuel and oils/lubricants, which will be consumed by the operating equipment. The majority of any heavy equipment maintenance will occur offsite at Painted Hills repair facility; however, unplanned repairs or minor maintenance may occur at the quarry site if required. Any waste oil generated at the project site will be collected and transported for offsite disposal by approved methods via properly trained and licensed personnel.

Painted Hills maintains an existing Business Plan, hazardous materials inventory, and a Spill Prevention Control and Countermeasure Plan (SPCC) which include employee training, record keeping, preventive maintenance and Best Management Practices (BMPs). These plans are submitted to the Hazardous Materials Management Division, the Certified Unified Program Agency (CUPA) for Riverside County, responsible for regulating hazardous materials business plans and hazardous waste. Painted Hills would be required to update these plans as necessary to reflect operational changes.

11. EROSION AND SEDIMENTATION CONTROL: The quarry expansion project has been designed to prevent erosion and/or sedimentation of adjacent properties due to waters discharged from, or entering, the project site. Velocity control devices will break up the area into small micro-drainages, allowing use of smaller control structures, greater infiltration rates, lowered erosion rates, and thus smaller sediment loads. Located on a hilltop, the quarry expansion area only receives water flows during precipitation that occurs directly onto the site. It is planned to mine the quarry in a manner that will provide for retention of any waters that may occur onsite within the excavation area. Erosion control measures (i.e. cross ditches, berms, waterbars, and straw wattles) will be implemented where necessary to achieve this complete retention.

Operations on-site will comply with a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges associated with industrial activities and employ storm water BMPs. NPDES goals are to eliminate unauthorized non-storm water discharges, prepare an SWPPP, and monitor storm water discharges requirements. An updated draft SWPPP is included in Appendix L.

As mining continues, a central depression will be maintained to allow any onsite water flows to deposit sediments within the confines of the expansion area. This enclosed depression area will be maintained until the quarry is mined to its final depth. Berming

along the perimeter of the quarry expansion area will be used to supplement the retention of water flows onsite.

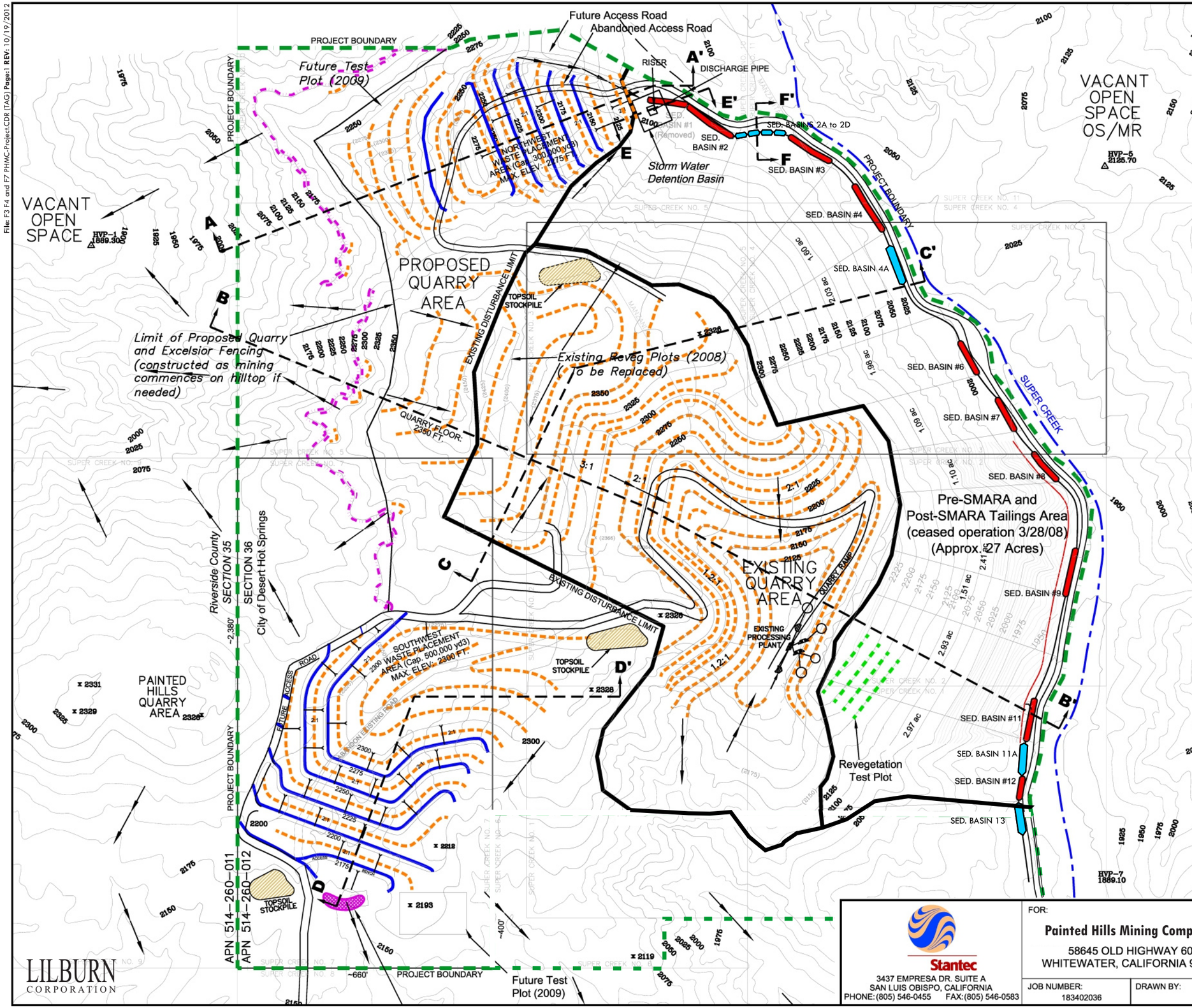
Erosion control is planned during operations and for final reclamation and is detailed in the Erosion Control Designs prepared by Stantec Consulting Inc. (see Appendix I-1). Figure 3 shows the planned erosion control measures over the entire site. Erosion control measures will prevent any offsite sedimentation or erosion that may occur.

West Slopes - The two hilltops are planned to be mined from the inside top slope downward to prevent any cast-off on the western slopes. To limit possible cast-off and sediment flow during heavy rains, silt or excelsior fencing would be constructed as needed at about the 2,175-foot elevation with a 6" straw wattle at its upslope toe (see Figure 3). In areas where natural drainage flow swales occur, a double fence would be erected as needed. Note that the straw wattles will be regularly inspected at least prior to the rainy season and after rains greater than 0.50" to determine if the wattles are still effective and if needed, will be replaced.

Waste Placement Areas - The Northwest and Southwest Waste Placement Areas will be graded with a drainage control system to prevent adverse drainage from the toe of the fill slope and over the entire structure. Rainfall and possible runoff that occurs directly onto the waste placement areas will be controlled using the following designs:

- For both stockpiles, water bars 1 to 2 feet in height armored with 6" straw wattles at their base located above the first lift and on the 10-foot wide horizontal benches;
- For both stockpiles, straw wattles (8" diameter) along lines of constant elevation at approximately half the distance on the 2H:1V waste material slopes;
- For the Northwest Waste Placement Area, a detention basin designed to handle a 20-year return period design storm for a 1 hour duration shall be constructed at the bottom of the waste placement area. The basin shall have a footprint area of 500 square feet and a riser depth of 13 feet with side slopes of 2-feet horizontal to one-foot vertical. Rip-rap shall be placed at all stormwater inlet points into the basin. The 24-inch minimum CMP riser shall be adequately supported at the base and fortified with rip-rap to withstand potential impacts from sediment and turbulence. The pipe shall discharge beneath the access road and into Super Creek. Rip-rap shall be placed at the pipe outlet to prevent scour within the creek channel. Overflow from the emergency spillway shall be directed into the existing series of sedimentation basins and channels along the base of the East Tailings slopes (see Figures 4 and 5 and Appendix I-1); and
- For the Southwest Waste Placement Area, a detention basin shall be constructed by building a small rip-rap dam with height of 8 feet at center composed of 14" to 24" rip-rap with 36" rip-rap anchors and gravel filled in its interstitial spaces (see Figure 6). Matting shall be buried beneath the outermost layer of rip-rap on the upgradient side of the dam to reduce its permeability.

File: F3 F4 and F7 PHMC-Project.CDR (TAG) Page:1 REV: 10/19/2012



GENERAL FEATURES

- Project Boundary
- Existing Disturbance Limit
- Surface Water Flow Direction
- B — B' Cross Section Location
- Existing Topography Contour
- Existing Sedimentation Basin
- Proposed Sediment Basin
- Super Creek Intermittent Stream

EROSION CONTROL FEATURES

- Waterbar - grade 100:1 to outside of palcement, with high at center of fill; armor bottom with 6-inch diameter wattles (straw or similar fill) and armor ends with cobble riprap.
- Wattle - 8-inch diameter (straw or similar fill) along line of constant elevation. Bury one-third diameter into slope. Wood stakes every 5 feet.
- Excelsior fencing - two rows at 2175 feet elevation where natural water flow concentrates (one row between areas of conc.), with the rows 10 feet apart and straddling maintenance trail. Wattles (6-inch diameter) on uphill side of each fence.
- Riprap Dam: riprap pile with lowest height at center (8 feet) composed of 12 to 18 inch nominal diameter native rock riprap having 24 to 36 inch riprap anchors (10%) and uphill face covered with matting or geofabric to retain silt and pass water. Uphill toe lined with 8 inch wattle, staked every 5 feet.
- Terrace: Hand dug, 2' wide, planted with Native Seed mix.

N

0 250 500

SCALE 1" = 250 FEET

No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
3437 EMPRESA DR. SUITE A
SAN LUIS OBISPO, CALIFORNIA
PHONE: (805) 546-0455 FAX: (805) 546-0583

FOR:
Painted Hills Mining Company
58645 OLD HIGHWAY 60
WHITEWATER, CALIFORNIA 92282

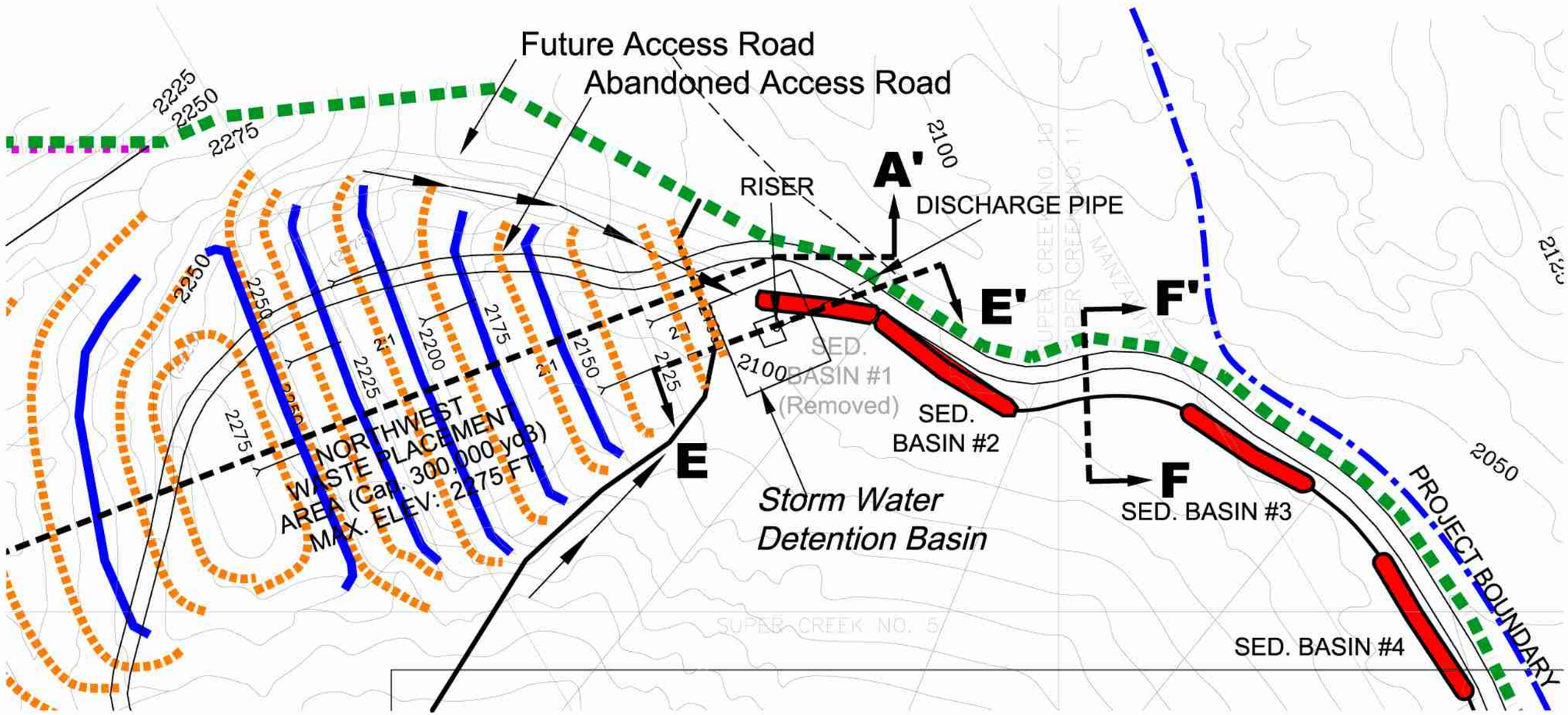
JOB NUMBER:	DRAWN BY:
183402036	SCS

PROJECT SITE

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 3

File: F3 F4 and F7 PHMC-Project.CDR (TAG) Page:1 REV: 10/19/2012



GENERAL FEATURES

- Project Boundary
- Existing Disturbance Limit
- Surface Water Flow Direction
- B — B' Cross Section Location
- Existing Topography Contour
- Existing Sedimentation Basin
- Super Creek Intermittent Stream

EROSION CONTROL FEATURES

- Waterbar - grade 100:1 to outside of palcement, with high at center of fill; armor bottom with 6-inch diameter wattles (straw or similar fill) and armor ends with cobble riprap.
- Wattle - 8-inch diameter (straw or similar fill) along line of constant elevation. Bury one-third diameter into slope. Wood stakes every 5 feet.
- Excelsior fencing - two rows at 2175 feet elevation where natural water flow concentrates (one row between areas of conc.), with the rows 10 feet apart and straddling maintenance trail. Wattles (6-inch diameter) on uphill side of each fence.

N

0 100 200

SCALE 1" = 100 FEET

No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

LILBURN CORPORATION

Stantec
3437 EMPRESA DR. SUITE A
SAN LUIS OBISPO, CALIFORNIA
PHONE: (805) 546-0455 FAX: (805) 546-0583

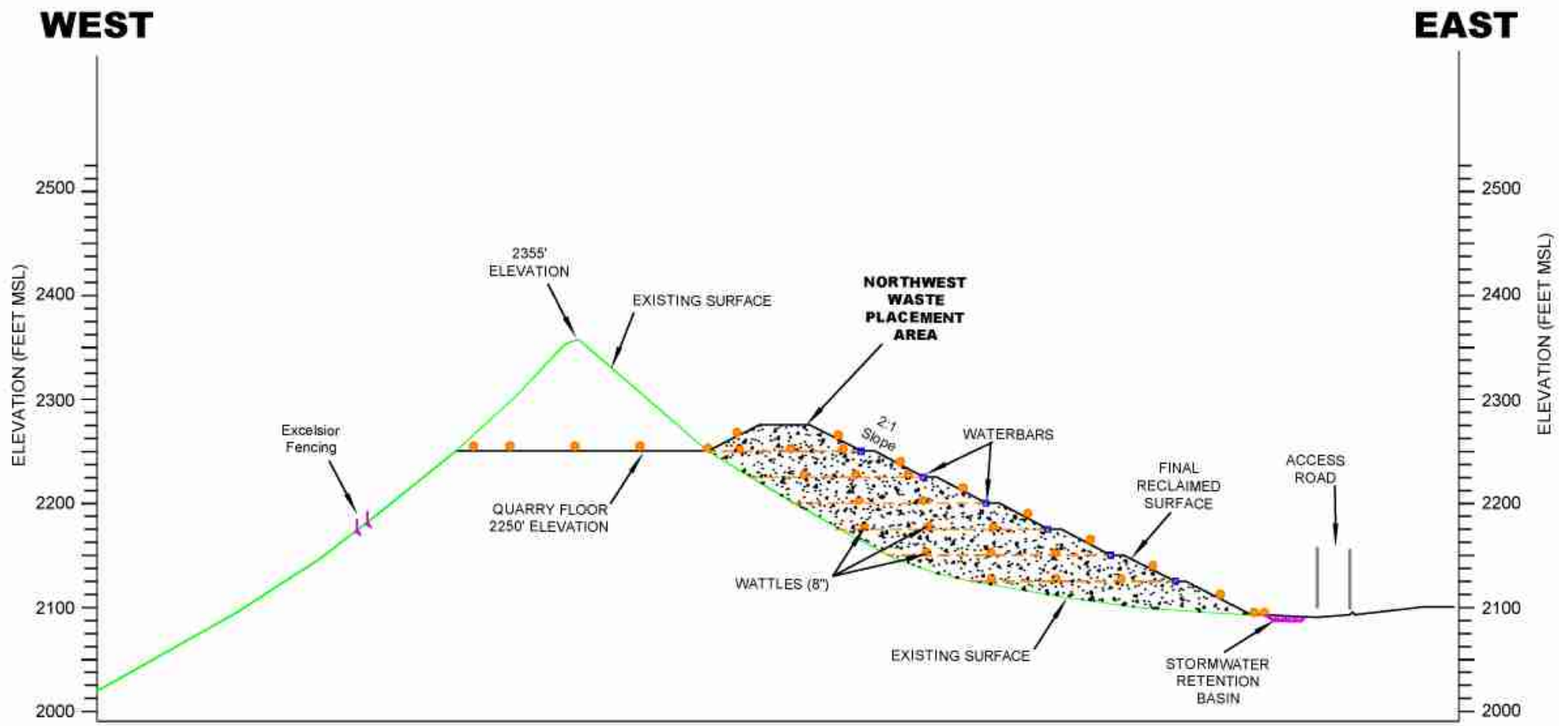
FOR:
Painted Hills Mining Company
58645 OLD HIGHWAY 60
WHITEWATER, CALIFORNIA 92282

JOB NUMBER: 183402036
DRAWN BY: SCS

NORTHWEST WASTE PLACEMENT AREA

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 4

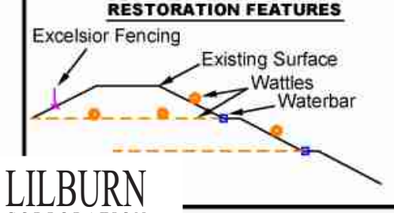


EROSION CONTROL DETAILS

Painted Hills Mining Company

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

RESTORATION FEATURES



Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Painted Hills Mining Company
SUPER CREEK CLAIMS QUARRY
PROPOSED EXPANSION
WHITE WATER, CA

DETAIL
PROPOSED NORTH QUARRY AREA

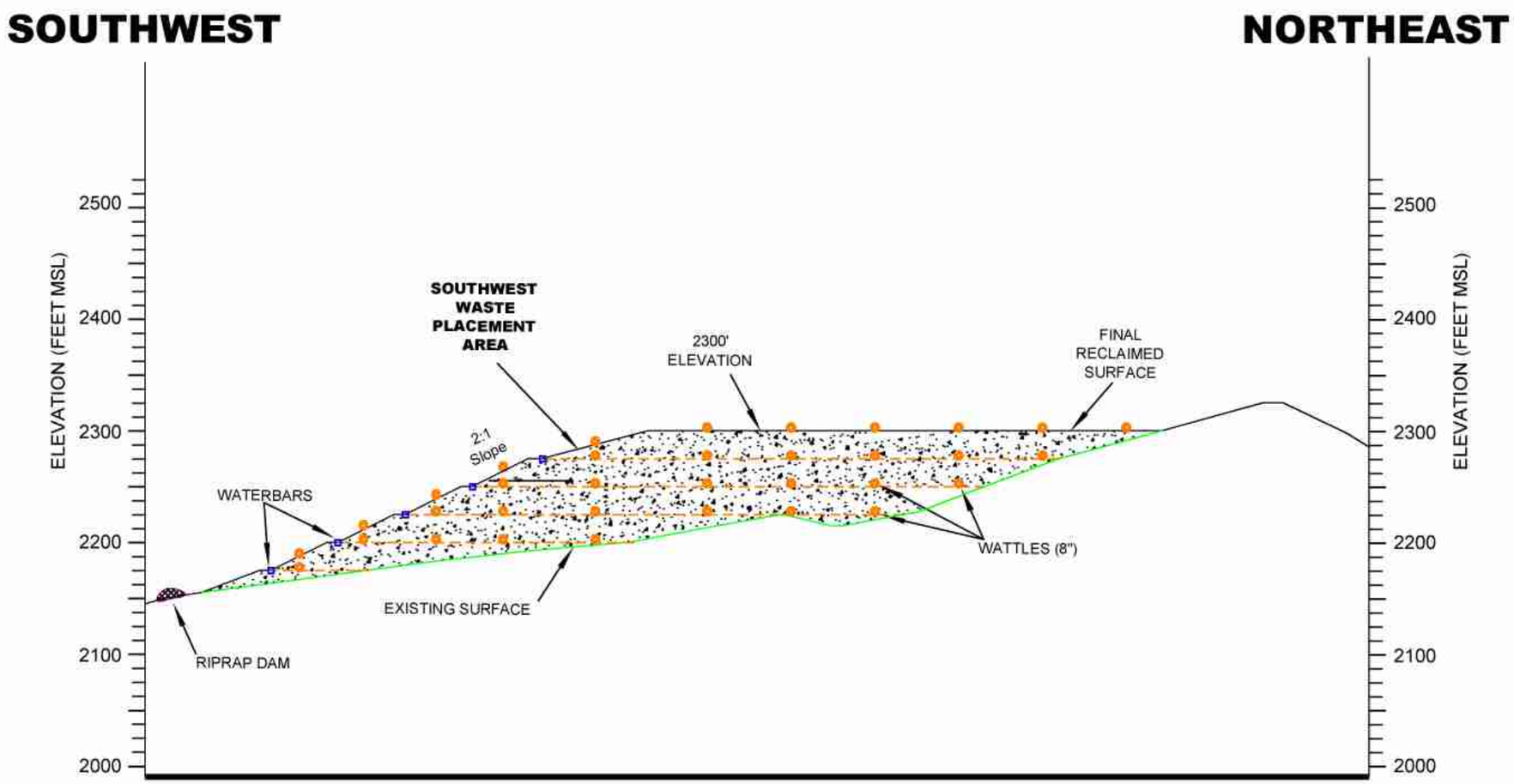
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
183402036	RE	SB	SB	05/05/2009

LILBURN CORPORATION

PROPOSED NORTH QUARRY
Cross Section

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 5

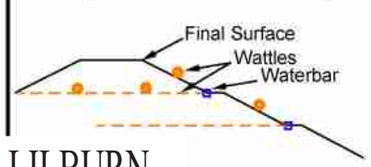


EROSION CONTROL DETAILS

Painted Hills Mining Company

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

RESTORATION FEATURES



LILBURN CORPORATION

Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Painted Hills Mining Company
SUPER CREEK CLAIMS QUARRY
PROPOSED EXPANSION
WHITE WATER, CA

DETAIL
PROPOSED SOUTHWEST WASTE PLACEMENT AREA

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
183402036	RE	SB	SB	05/05/2009

PROPOSED SOUTHWEST WASTE PLACEMENT AREA Cross Section

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 6

- North, West Central and Existing Quarry Areas – The mined and final surface is anticipated to be bedrock and while short-term sediment load is probable from fines left by the mining activity, once the thin layer of loose fines is eroded, bulk rock will eventually dominate the surface. The native bulk rock is not highly erodible. Thus, the proposed erosion control addresses the earliest precipitation events and is not intended to remain present in the long-term (decades).
- During operations, a series of straw wattles and waterbars will be used to control fine material erosion as necessary within the quarry which will drain into the quarry pit. While wattles are relatively short lived, they should hold up for the time-frame in which the majority of fine material may erode and can be replaced as necessary. The 6" diameter straw wattles will be spaced irregularly as operations advance on lines of constant elevation (see Figure 7). These measures and other measures developed in the SWPPP will prevent the possibility of adverse effects on adjacent properties for the remainder of the project life.
- Production material stockpiles will continue to be maintained at minimum volumes necessary to reduce their exposure to wind and water erosion. Product stockpile locations have been selected to provide protection from any direct water flow impacts. Wind erosion of fine-grained constituents of the waste placement areas will be controlled to comply with SCAQMD requirements with periodic water spray applications, or other SCAQMD acceptable control measures.

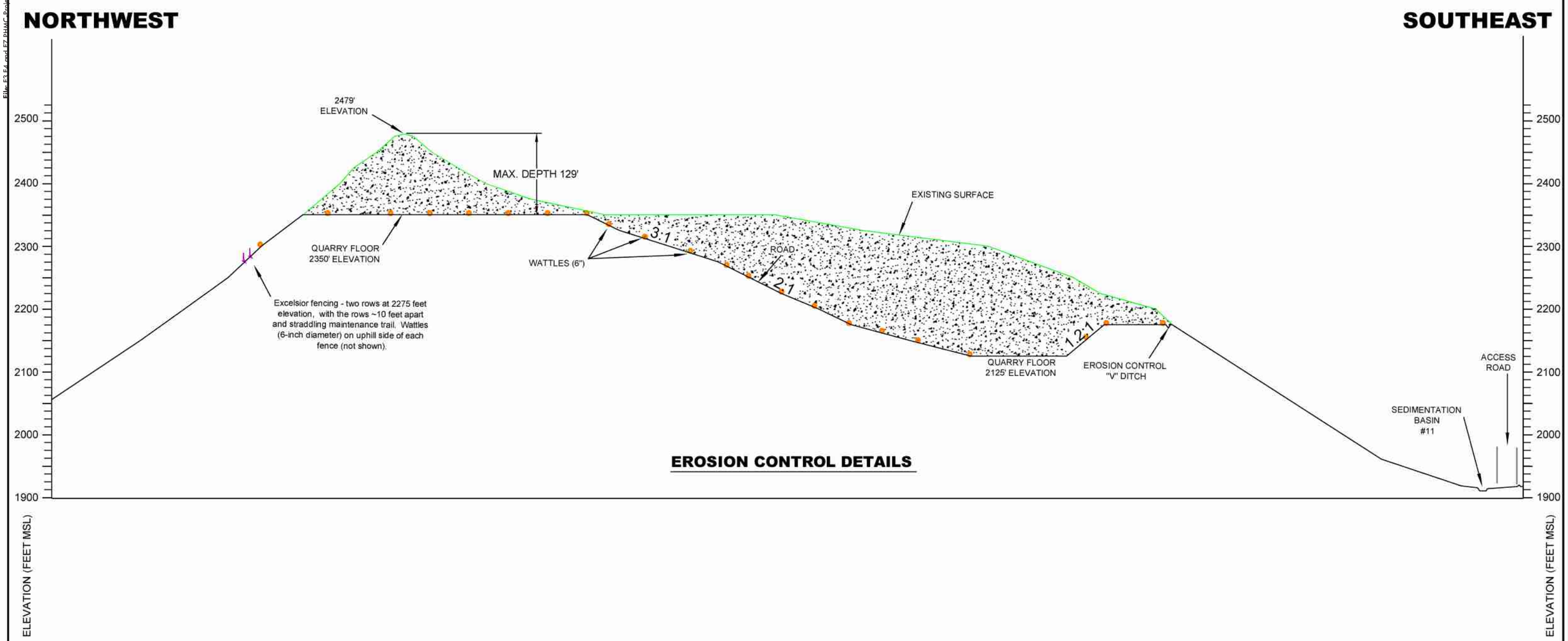
Eastern Tailings Slopes (inactive) – The Eastern Tailings Slopes were utilized to deposit waste material per the approved 1993 Supplemental Reclamation Plan and its slope design by Rasmussen Associates. These slopes were developed in accordance with the Rasmussen report which included a "Mine Tailings Slope Stability Analysis" by John Byerly, Inc. Geotechnical Engineers. Subsequent review of said slopes by CHJ (see Appendices H-1 and H-2) found that the static and seismic slope stability calculations utilizing the strengths obtained during the 2012 large-scale remolded shear testing yield stable slopes for the purposes of reclamation under SMARA. No additional measures with respect to deep-seated slope stability are necessary for reclamation of the existing tailings slopes.

The term "landslide", as used in this report and the CHJ report, refers to deep-seated slope failures with a rupture surface at least 25 feet deep. Landslides are typically related to the underlying structure of the parent material. Surficial failures refer to shallow failures that affect the upper geologic material. Evidence for deep-seated landsliding was not observed in the quarry walls or on the aerial photographs reviewed. Evidence of minor surficial failures both as talus and as shallow rotational failure within the tailings slope was observed in the quarry area during this investigation. These surficial failures are manifested

as an accumulation of talus on the quarry benches and toes of slopes as well as minor failures within the upper tailings slopes.

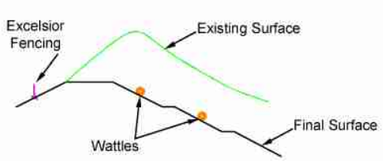
SMGB/OMR has expressed concern about the implied possibility of surficial failures up to 25 feet deep at the site based on the previous paragraph as it appears in the report by CHJ (February 15, 2011). The native slopes are bedrock with little to no soil cover and as such

File: F3 EA and F7 PHMC Project CDP (TAC) Page 1 REV: 10/19/2012



EROSION CONTROL DETAILS

RESTORATION FEATURES



LILBURN CORPORATION

No warranty is made by SECOR International, Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Painted Hills Mining Company
SUPER CREEK CLAIMS QUARRY
PROPOSED EXPANSION
WHITE WATER, CA

JOB NUMBER: 183402036
DRAWN BY: RE

DETAIL EXISTING QUARRY

SUPER CREEK QUARRY
Painted Hills Mining Company
San Bernardino County, California

FIGURE 7

are considered to have a very low susceptibility to surficial failure. To determine the current occurrence and distribution of surficial failures on the tailings slopes, a field reconnaissance was conducted on foot on May 25, 2012, using binoculars to examine the tailings slopes from the east side of Super Creek. The east side was occupied along traverses conducted at various elevations to provide the most advantageous views of the tailings slopes. Evidence for surficial failures was noted on a copy of the base map used in this addendum.

Two types of shallow failures were observed in the tailings slopes. The first type occurs relatively frequently within erosional gullies as a response to over-steepening of the gully sidewalls. These occur within near-vertical gully walls, primarily within the pre-SMARA slopes, and are a few feet in height.

The second type of surficial failure, consisting of soil slips in the non-eroded tailings slopes, was observed in a small area in the recent tailings in the southern portion of the site. This area consisted of three adjacent surficial failures totaling about 30 feet wide and a few feet deep. These failures are shown on the Geologic Map (Appendix H-1, Enclosure "C-1"). They are shown at a better scale on an appended photograph included as Enclosure "C-3". It appears that these failures occurred on a slightly over-steepened portion of the tailings slopes that were constructed during a previous lower elevation of spoils placement. These surficial failures were the only ones observed in the non-eroded tailings slopes. Based on these observations, we conclude that the as-built, non-eroded tailings slopes are generally not susceptible to surficial failure. This lack of susceptibility is a function of the strength of the tailings materials and the angle of the as-built slope.

Active deposition of waste onto the eastern tailings slopes was terminated in March 2008. The waste material slopes are divided into both Pre-SMARA jurisdictional and SMARA regulated sections. The Pre-SMARA waste material was deposited prior to the 1975 promulgation of SMARA regulations and is not subject to the current reclamation plan requirements. The erosion control designs discussed herein are aimed at the Post-SMARA portions of the slope. However, it should be noted that the Pre-SMARA areas show evidence of variation in slope, the gradual establishment of flora, and thus, the development of micro-habitats that are conducive to naturally-developed erosion control.

Success observed in the Pre-SMARA areas, where time and natural processes have been allowed to proceed, shall be applied to the erosion controls implemented for the Post-SMARA areas. Erosion control and reclamation of these slopes will reduce runoff flow and sedimentation erosion via rip-rap filling of slope rills, elimination of runoff over the slope rim, increased placement of rip-rap at base of slope, a perimeter collection channel and series of detention basins along the inside edge of the access road, cutting of terraces (islands) into the slopes and revegetation. Actions undertaken during the past year and planned for the life of the project include the following:

1. Sedimentation Basins – Twelve sedimentation basins were constructed along the base of the Eastern Tailings Slopes and west of the access road which is located west of Super Creek in November 2007 to collect and limit fines erosion and runoff (see Table 2). The access road along Super Creek is bermed adjacent to the creek and the

roadbed is angled inward toward the waste material slope. A drainage channel along the inside of the road intercepts runoff from the slopes and conveys flows downstream through a series of narrow detention basins and along the inside edge of the road to a point where the gradient flattens. The conveyance channel joins Super Creek at the road crossing located south of the southeastern project boundary.

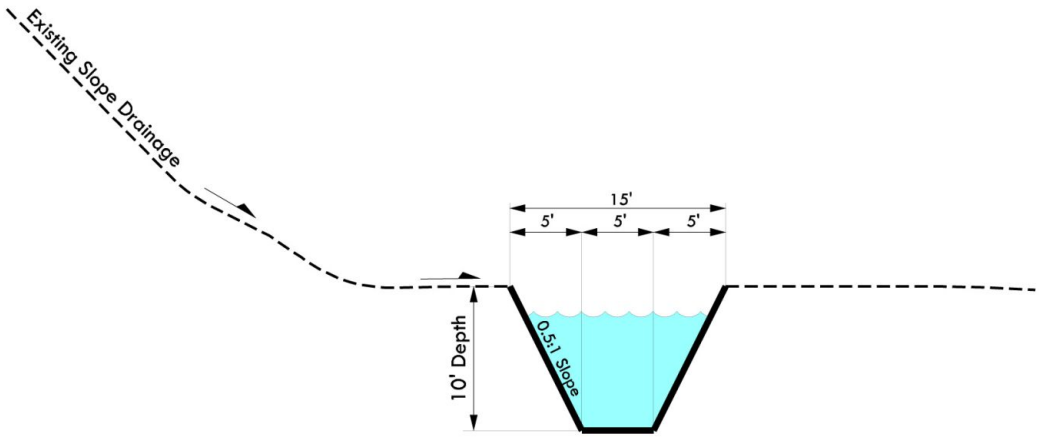
The inflow and outflow areas of the basins and the connecting drainages have been armored with rock and rip-rap to slow flows and capture sediment. The adjacent road provides easy access for the inspection and removal of accumulated sediment in the basins.

The capacity of the existing basins shall be improved and maintained by 1) removing accumulated sediment to achieve a basin depth of 5 feet behind the spillway, where side-slopes allow; 2) raising the spillway height by 1-foot using additional rip-rap, where feasible; 3) extending the length of the basins by maintaining the invert elevation as far upstream as side-slope conditions allow; and 4) providing a rip-rap stabilized basin inlet to prevent headward erosion at the upstream edge of the basins. With these improvements, the capacity of the existing basins is approximately 1.4 acre-feet (af) (see Table 2). The basin capacities were updated from the Stantec 2009 report and were estimated using an effective width of 10 feet and depths that vary from a spillway depth of 10 feet with the approximate 8 feet per 100-foot gradient related to the basin length (see Figure 8).

In order to meet the 20 year/1 hour storm event per SMARA, the basins would need a total capacity of 2.04 af (Stantec 2009). To meet this capacity, five new and 2 extended existing basins will be constructed with an additional capacity of approximately 0.66 af providing a total capacity of 2.06 af (see Appendix I-3).

The conveyance channel connecting the basins will be improved by 1) excavating a uniform swale between 3 and 4 feet wide and 2-feet deep depending on location; 2) lining and stabilizing the channel sides and bottom with D50 = 6- to 8-inch diameter rip-rap; and 3) protecting against erosion of the inside bank of the channel using larger rock where flows impinge upon unconsolidated material.

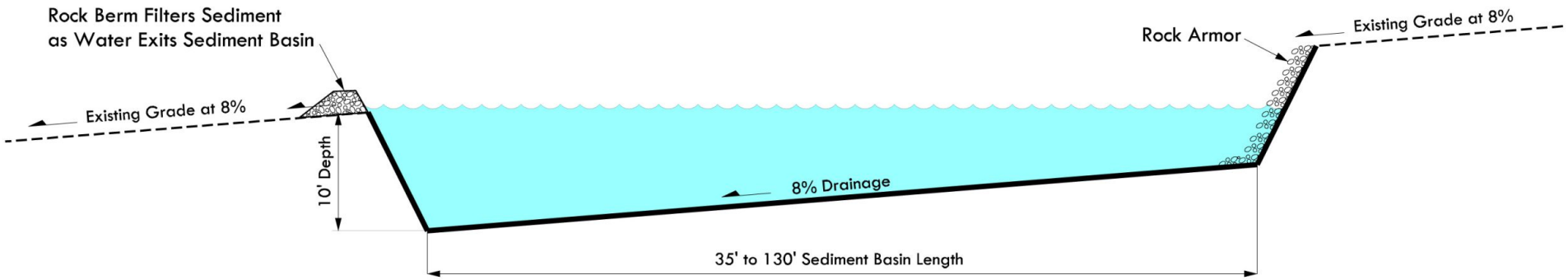
The basins shall be inspected at least once per year prior to the rainy season (fall months) and after every significant rainfall event defined as 0.50” of precipitation as recorded at Whitewater Trout Farm, Snow Creek, or Beaumont as available on the web through the National Weather Service, San Diego office at http://www.wrh.noaa.gov/sgx/data/hydro/LAXRRMRIV. Prior to the rainy season or if upon inspection, the basins are more than half full of sediment; all accumulated sediment shall be removed to the original design volume. Upon termination of operations in approximately 25 years, it is expected that the slopes will be stabilized with vegetation. The basins will be filled to approximate original contours and revegetated. More detailed monitoring procedures are included in Section 14 under Reclamation and in Appendix I-1.



Typical Sediment Basin Cross Section

Super Creek Quarry

Not to Scale



Typical Sediment Basin

Super Creek Quarry

Not to Scale

TYPICAL SEDIMENT BASIN

SUPER CREEK QUARRY

Painted Hills Mining Company

San Bernardino County, California

FIGURE 8

LILBURN CORPORATION

Table 2
(Revised January 2013)
Sedimentation Basins
At Base of Eastern Tailings Slopes

Sedimentation Basin #	Length (feet)	Width (feet)	Depth (feet)	Capacity (cy)
1*	92	15	10	216
2	130	15	10	231
3	115	15	10	230
4	130	15	10	231
5	56	15	10	150
6	87	15	10	210
7	88	15	10	211
8	85	15	10	208
9	117	15	10	230
10	77	15	10	196
11	104	15	10	225
12	50	15	10	148
Total				2,255 cy (1.4 af)
Proposed Sediment Basins				
2A	25	15	10	100
2B	25	15	10	100
2C	30	15	10	110
2D	30	15	10	110
4A	75	15	10	190
11A	85	15	10	208
12	+30	15	10	+50
13	80	15	10	200
Total Proposed	7 new; 1 extended			1068 cy (0.66 af)
Total				2.06 af

* Sedimentation Basin #1 will be eliminated upon construction of the planned detention basin at the base of the Northwest Waste Placement Area.
Source: Webber and Webber Mining Consultants, 2007; Stantec 2009: and Lilburn, Bonadiman 2013

2. Rip-Rap Placement – Rip-rap ranging in size from less than 0.25 ton to 1.0 ton was previously placed along the base of the Eastern Tailings Slopes where an adequate bench is present between the toe of the slope and the access road along Super Creek in accordance with the approved 1993 Reclamation Plan. Where closely spaced, the rip-

rap has reduced runoff velocity sufficiently to allow deposition of entrained sediment which has promoted establishment of grasses and brush. In some locations, the rip-rap is too widely spaced and placement of additional rip-rap is proposed where an adequate bench is present and access to heavy equipment is available. Rip-rap sizing requirements are based on shallow-depth runoff velocity calculations provided by the Federal Highway Administration (FHWA, Circular 22) and design recommendations provided in the Riverside County Flood Control District Hydrology Manual. The calculated peak runoff flow velocity near the base of the slope is up to 8.5 feet per second (ft/s). Based on the calculated flow velocity, the design size for the rip-rap is 0.25 tons (D50 approximately 20-24 inches diameter). Larger rip-rap, up to 1.5 X D50 can be used to create a buttress against which smaller rip-rap can be placed on the upslope side to fill small voids. The thickness of the rip-rap layer will vary depending on the estimated accumulation of sediment, but at a minimum should be 2.25 X D50.

3. Reducing Top of Slopes – Painted Hills is utilizing an excavator and a crane with a rigged sled to remove excess fines from the top of the slopes to reduce erosion potential. A perimeter berm will be left in-place to eliminate any future runoff down the face of the eastern slopes.

4. Erosion Control – Painted Hills has placed or backfilled existing rills and gullies with graded rock material to breakup concentrated flows and to reduce velocity within the gullies to decrease the erosion potential. The fill should also create a relatively stable surface to allow a foothold for vegetation establishment.

5. Revegetation – The approved Reclamation Plan calls for islands of vegetation to be developed on the slopes to reduce erosion. Painted Hills and its vegetation consultant have cut narrow horizontal benches or terraces a minimum of 2 to 3 feet wide at 25-foot intervals into the face of the slope. Where existing erosional rills are present, the benches were reinforced with rock rip-rap of appropriate size to limit further erosion and/or straw wattles. The benches will also be partially covered with rock and then seeded with the seed mix included under the Reclamation section below. These benches, erosion, and revegetation will be monitored at least once per year and if continued erosion is evident, then additional remediation measures will be undertaken. These may include the placing of additional rip-rap and straw wattles in lines where erosion is observed, construction of additional terraces, and reseeding. Revegetation is discussed in more detail in Section 13 under Reclamation.

12. BLASTING: Blasting, or storage of explosives onsite, is not proposed at this time.

13. TRUCK TRAFFIC: At the current/proposed mining rate of 50,000 tons of material per year, approximately 25,000 tons of saleable products will be exported from the quarry site annually. This export rate would result in an average of 5-8 daily truck trips utilizing 20-ton over-the-road haul trucks operating on a 5-day work week. Peak truck traffic may be slightly higher at times, however, this would be a rare occurrence. The existing BLM Right-of-Way dirt haul road will continue to be utilized for haulage of the rock from the quarry to the Painted Hills stock yard 3.5 miles to the south. Safety berms will be maintained along

the haul road, where necessary. Truck drivers are advised daily regarding any changes to haul road conditions by the mine operator, particularly after significant storm events. Truck drivers are also instructed to report any observed road conditions to the mine operator that may impair safe road conditions.

RECLAMATION

The intent of SMARA is to "maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that: (a) adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative uses; (b) the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and (c) residual hazards to the public health and safety are eliminated" (Section 2712).

Article 9, Section 3700 of SMARA regulations states the following: "Reclamation of mined lands shall be implemented in conformance with standards in this Article (Reclamation Standards). The standards shall apply to each surface mining operation to the extent that:

(1) they are consistent with required mitigation identified in conformance with CEQA; and

(2) they are consistent with the planned or actual subsequent use or uses of the mining site."

Painted Hills proposes to reclaim the quarry site to meet the State's SMARA that will minimize impacts to the surrounding community and environment. The objectives of this Reclamation Plan are to:

- Eliminate or reduce environmental impacts from mining operations;
- Reclaim in a usable condition for post-mining end uses which will include open space/habitat;
- Contour mining features and revegetate disturbed areas to minimize aesthetic impacts and erosion; and
- Reclaim the site as necessary to eliminate hazards to public health and safety.

1. **SUBSEQUENT USES:** The proposed use of the reclaimed project land is vacant open space managed by the Bureau of Land Management. Upon cessation of all mining/reclamation activities, the BLM will have authority to determine the best use of the land.

2. **RECLAMATION SCHEDULE:** In general, physical reclamation procedures will include regrading as necessary to achieve planned slopes, implementing and maintaining erosion control features, roughening the compacted surface to hold moisture, adding any stockpiled surface material containing banked seeds and available silts, seeding with native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance. Reclamation activities will be accomplished concurrently with the planned excavations.

   The permanent perimeter quarry area in the upper northwest areas will be reclaimed as completed to meet designed slopes and revegetated concurrent with ongoing mining.

Revegetation will be ongoing during the quarry mining operation once the final slopes and quarry floors have been established. Surface material salvaged for revegetation will be limited due to the surficial rock conditions on-site. Available material containing the native seed bank will be placed in islands augmented with additional silts and seeding with native species. Roads not needed for site and quarry access will be stripped of any road base material, ripped, covered with available growth media, and revegetated per the revegetation plan.

Reclamation and revegetation will be undertaken within two years of the cessation of all excavation activities. However, final reclamation is contingent on meeting the revegetation success criteria and may continue longer than five years.

When a particular quarry site area, including inter-quarry roads and ramps, will not be disturbed by continuing project activities, preparations for reclamation will begin. Preparations of the surface for reclamation will include grading and ripping to loosen the compacted areas or hard rock surface, covering islands with up to one foot of salvaged growth media and fines, and seeding with collected and commercially purchased local native seeds. All quarry excavation slopes within the native bedrock will be mined (and final graded, if necessary) to no steeper than 1.2H:1V. The waste placement areas will be final graded to no steeper than 2H:1V.

When the final grading of a particular area is finished, revegetation activities will commence as described in the "Revegetation Plan" prepared by LSA Associates, dated August, 2006 (see Appendix F). Two revegetation test plots were planted in the winter of 2008 – 2009 on the east slopes and additional test plots will be established onsite for the quarry area next season. Seed mixtures for the sandy waste slopes are included below and final seed mixtures for the rocky quarry areas will be determined by plant transect data and revegetation results.

Table 3 details the schedule to reclaim all disturbed areas, present and future.

As indicated, if the expansion project is approved in 2013, mine excavations will terminate at the end of the year 2038. All equipment not required to complete reclamation activities will be removed from the site. Painted Hills will reclaim the site as vacant open space.

The ultimate goal of the revegetation of this project is to reestablish plant life that existed prior to mining as required by SMARA's Standard for Revegetation. Surface material salvaged for revegetation will be limited due to the surficial rock conditions on-site. Available material containing the native seed bank will be placed on the quarry floors and benches augmented with additional growth media and seeding with native perennial species.

Table 3
Reclamation Schedule (Phases)
Super Creek Quarry

Phases	Approximate Begin Date	Approximate Date Complete	Activity
1	2013	2023	Sloping, erosion control, and revegetation of Eastern Tailings Slopes and upper quarry slopes as completed in the northwestern quarter of site. Continue to monitor and maintain erosion control measures and revegetation test plot areas; maintain soil stockpiles; and develop final revegetation seed mixture.
2	2024	2037	Rip and recontour finished quarry areas, including inter-quarry roads and ramps that will not be further disturbed by mining activities. Revegetate completed quarry areas and waste placement areas with appropriate seed mix. Monitor and maintain erosion control measures throughout site including the Eastern Tailings Slopes, sedimentation basins, revegetation test plot areas, and soil stockpiles.
3	2038	2038	Mining excavations cease. All mobile and stationary plant equipment shall be removed from the site. Final recontouring implemented as required to meet approved design. Fill sedimentation basins and revegetate. Continue revegetation activities on all quarry areas, including any quarry roads.
4	2038	2039	Finalize all revegetation activities and remediate substantial erosion.
5	2039	2043	Monitor site revegetation until success criteria are met. Remediate as necessary including repairing erosion, reseeding, and weeding.
6	2044	2048	Final reclamation of all remaining un-reclaimed quarry roads on-site.

Revegetation success criteria includes three required measures: Plant cover (vertical projection of the plant canopy over the ground surface), Density (number of individual plants per unit area), and Species Richness (total number of plant species). As recommended by the Office of Mine Reclamation (OMR) and SMGB in their letter dated February 17, 2009, successful revegetation is defined as when cover achieves 35 percent of baseline, when density and species richness achieve 50 percent of baseline, and are self-sustaining demonstrating a positive trend in cover and diversity. Actual baseline plant data was recorded in March and April 2009 and determined that the baseline for the plant cover was 15.8 percent, density was 70 individual plants per 500 square meters, and species richness was nine species. Based on the above, the success criteria would be 6 percent for cover, 35 plants per 500 square meters, and a diversity of five native plant species. Details are provided in Section 12 below and in Appendix J-2.

This revegetation success criteria goal will be attained under the direction of a qualified individual who will direct all revegetation efforts. The final results of the Revegetation Test Plot activities will form the basis for continuing revegetation activities and appropriate seed mix and amounts. Revegetation activities will be monitored once a year by a qualified person during the life of the project. Any changes to planned revegetation methods will be reviewed in coordination with officials of the BLM and the SMGB.

3. **FUTURE MINING:** Proposed mining/reclamation activities will not preclude future mining of the site or surrounding areas.

4. **PUBLIC SAFETY:** Throughout the continuation of mining and subsequent reclamation activities, the existing entrance/exit gates (one located ½-mile south of the quarry and one just off Old Highway 60, approximately 3 miles south of the quarry site) will provide for controlled access, thereby limiting unauthorized public access. Also, the project will comply with all federal (MSHA) and California OSHA mine safety regulations concerning operating standards. Workers, including contract labor, will be trained in mine safety and first aid with annual refresher courses as required by Federal and State Regulations. Pursuant to CHJ Consultants Slope Stability Investigation, all final quarry cutslopes will remain at no steeper than 1.2H:1V, with all waste placement area slopes no steeper than 2H:1V. Any elevated quarry roads that may exist will have safety berms where required to prevent equipment operators from trespassing onto adverse slopes.

   After reclamation activities have been completed, the site will return to open space managed by the BLM. Any gates, fences, etc. will be left in place from the site as part of final reclamation per direction of the BLM.

5. **POST-RECLAMATION:** Upon completion of final reclamation activities, the project site will visually display manmade features, in particular the mined quarry areas. The mined hilltops will have lower maximum elevations and broad, flat plateaus compared to their pre-mining appearance. The existing quarry area floor will be mined to a minimum elevation of 2,125 feet amsl, and the rock hilltop quarry areas will be mined to a minimum elevation of 2,250 feet amsl. All quarry areas will incorporate grading that gently slopes to a central depression area for drainage collection. All quarry area cutslopes will be final

graded to no steeper than 1.2H:1V, while the Northwest and Southwest Waste Placement Areas will be final graded to no steeper than 2H:1V. Revegetation will help to stabilize the project slopes as well as provide natural color/texture to the barren cutslope material that will be exposed due to mining. Due to the remote location of the proposed quarry site, however, it will rarely (if ever) be viewed by the general public.

6. **DRAINAGE AND EROSION CONTROL:** Drainage patterns on the project site currently direct flows into the quarry depression retention area through the use of grading and berms. Drainage only occurs during periods of rainfall directly onto the site, and doesn't cause any significant erosion of the quarry. Following reclamation of this project, drainage will continue to be retained onsite to the extent practical. The natural watershed in the area of this project directs water east to Super Creek or west to Whitewater River. Minimizing offsite drainage flows to prevent erosion, sedimentation, stream flow or stream bank stability is a goal of mining and reclamation activities as proposed in this plan.

   Erosion control features will continue to be incorporated and maintained through final successful reclamation and include revegetation and erosion control measures such as straw wattles across the slopes; water bars armored with wattles; excelsior fencing; and detention basins below the waste placement areas as described in detail in Section 11 under Mining above and in the "Amended Erosion Control Designs" (see Appendix I-1 and Appendix I-3). These activities should continue to minimize negative effects of erosion potentially caused by the proposed project activities.

7. **SLOPES AND SLOPE TREATMENT:** All quarry slopes will be reclaimed to produce stable slopes as recommended in the CHJ Consultants. Slope Stability Investigations (Appendices H-1, H-2, and H-3), reducing the possibility of landslides, earth flows, or rock falls. As depicted on the Plan of Operations Mine Plan and Reclamation Plan Maps, all quarry cut slopes will be final graded to no steeper than 1.2H:1V with all waste placement area slopes no steeper than 2H:1V. Grading, as well as the placement of berms at the crest of all project slopes and pursuant to other recommendations in Stantec's "Amended Erosion Control Designs" will prevent adverse drainage from the toe of the fill slopes. To the extent practical, all project slopes that will not be impacted further by excavation and processing activities will be revegetated annually. This annual revegetation procedure, as well as other measures previously described, will inhibit erosion and should effectively stabilize the finished slopes.

   A registered professional engineer or geologist will annually observe the heights and inclinations of all on-site slopes with respect to the mining and reclamation plan requirements. This observation would include an assessment of whether the slopes are within the permitted boundaries. Evidence for instability observed, such as tension cracks, deep-seated failures, shallow failures (including soil-slip type failures and rockfalls/toppling), and areas of significant erosion will be noted. Recommendations for mitigation of significant slope failure concerns would be included. Such measures could include removal of overburden, buttressing, slope flattening, slope removal, manual or equipment-based scaling of loose boulders, and minor re-grading to re-direct surface water flows. If a potential hazard to people or equipment is observed, then recommendations for

protection of people and equipment will be provided. A report would be prepared that documents the site observations, potential slope stability concerns, and recommended mitigation, if any, and included in the overall annual report.

Loose boulders encountered during mining should be removed from slope faces with on-site equipment. Unstable boulders left on slope faces above working benches should either be manually removed or, if accessible, removed by equipment. In the unlikely event that boulder removal should trigger larger area of observed instability, the engineering geologist should be notified so that the hazard can be evaluated. People and equipment should be protected from any toppling boulder hazards.

Eastern Tailings Slopes (inactive) – The Eastern Tailings Slopes were utilized to deposit waste material per the approved 1993 Supplemental Reclamation Plan and its slope design by Rasmussen Associates. These slopes were developed in accordance with the Rasmussen report which included a "Mine Tailings Slope Stability Analysis", by John Byerly, Inc. Geotechnical Engineers. Subsequent review of said slopes by CHJ (see Appendices H-1 and H-2) found that the static and seismic slope stability calculations utilizing the strengths obtained during the 2012 large-scale remolded shear testing yield stable slopes for the purposes of reclamation under SMARA. No additional measures with respect to deep-seated slope stability are deemed necessary for reclamation of the existing tailings slopes at this time. No evidence of deep-seated instability, such as tension cracks, scarps or slumping were observed.

In order to verify assumptions with regards to strength parameters utilized in slope stability calculations for the Eastern Tailings Slopes, additional testing of tailings slope materials will be conducted prior to establishment of final slopes locations. Specifically, additional tailings material sampling and strength testing will be conducted by a qualified professional when the quarry floor reaches elevation 2,150 feet. Samples will be collected from materials undisturbed by post-2008 mining as shown on cross-section B-B', Sheet 1 of the Plan. The results of such confirmation slope stability testing should be documented in a final slope stability report, and if changes to the Eastern Tailings Slope design are warranted, then the reclamation plan will be amended as required.

Active deposition of waste onto these slopes was terminated in March 2008. Reclamation of these slopes to reduce and limit erosion of the fine materials is ongoing. Actions undertaken during the past year which will be monitored, maintained, and remediated as necessary in the future to limit erosion on the slopes include the construction and maintenance of sediment basins at the toe of the slope; placement of rip-rap at toe of slope, reduction of the top of slopes by material removal; erosion control cross terracing; and revegetation. Section 11 under Mining above and Appendix I-1 details the existing and planned erosion control measures and maintenance.

8. PIT AREAS AND EXCAVATIONS: Preparation of disturbed areas for reclamation (final contouring and ripping) will occur annually on those excavation slopes and mined-out quarry areas that will not be further disturbed by continuing mining activities. All quarry excavation slopes will continue to be mined (and reclaimed) to no steeper than 1.2H:1V.

When the final grading of a particular quarry area is completed, revegetation will commence.

8.5 QUARRY RAMPS, ROADS AND BLM RIGHT-OF-WAY ROAD SERIAL NO. CACA-22568: Reclamation activities will occur annually on any quarry ramp/road on-site that will not be required for continuing mining activities or reclamation activity access. Roads not needed will be stripped of any road base material, ripped, covered with available growth media, and revegetated per the revegetation plan. The BLM right-of-way access under CACA 22568 will be left in-place unless otherwise directed by the BLM.

9. PONDS, RESERVOIRS, TAILINGS, WASTES: No ponds or reservoirs are proposed throughout the life of this proposed project. All mine wastes produced from the proposed quarry expansion area (minus ½ inch material) will be placed in the designated Northwest and Southwest Waste Placement Areas and graded to no steeper than 2H:1V with described erosion control as described previously. The two waste placement areas will be revegetated in the same manner as the quarry area though with a more varied seed list.

Dams or embankments are not proposed for any excavation or processing activity during the life of the project except for the small detention dam in the southwest which well be left in-place.

10. CLEAN-UP: All clean-up operations will be conducted within one year of the termination of mining estimated for 2038. Project equipment not required for final reclamation activities will be removed from the site. Scrap material, refuse, unwanted equipment, and surplus materials will be removed and disposed of at an appropriate landfill site. Process plant facilities and equipment will be removed from the site. This will include dozers, loaders, crushing and screening plant, conveyors, etc. Refuse in any form will not remain on the project site and will be appropriately disposed of in a permitted landfill. Excess material piles and disturbed areas will be regraded for positive drainage, scarified, and revegetated.

11. CONTAMINANTS: Chemicals or other hazardous materials are not utilized or produced during processing of materials at this site, nor are any proposed for future use. Painted Hills maintains an existing Business Plan, hazardous materials inventory, and a SPCC which include employee training, record keeping, preventive maintenance and BMPs. These plans are submitted to the Hazardous Materials Management Division, the Certified Unified Program Agency (CUPA) for Riverside County, responsible for regulating hazardous materials business plans and hazardous waste. Painted Hills would be required to update these plans as necessary to reflect operational changes.

The only hazardous materials occasionally used and consumed on the project site are diesel fuel and oils/lubricants. These are used in the loaders, dozers, and processing plant equipment. Ordinarily, maintenance of heavy equipment will occur offsite at Painted Hills stock yard; however, minor repairs/maintenance may occasionally occur at the quarry area, if required. All waste oil generated from the project site (operating equipment) will be collected and transported for offsite disposal by approved methods in a timely manner. This

will be conducted by properly trained and licensed personnel. These procedures, and any lawful changes to these procedures, will be adhered to during the proposed project life.

Any soils that may become contaminated during the course of project operations onsite will be stockpiled and removed from the site in accordance with all federal, state and local regulations to an approved hazardous waste repository. Any remaining fuel, oils/lubricants, or other hazardous materials will also be removed from the site and disposed of in the appropriate legal manner. Once this is accomplished, and prior to final recontouring and revegetation, a final environmental site review will be conducted by the BLM to document the cleanup of contaminants.

12. **SOILS AND FINE-TEXTURED WASTE:** Topsoil does not exist throughout the existing active quarry area; however, a thin veneer of topsoil covers portions of the proposed project expansion area. Where suitable topsoil material is present, at least the first 12 inches will be cleared, used for concurrent reclamation if areas available, or stored for reclamation prior to expansion into the new excavation area. This topsoil material will be stockpiled in three storage areas for subsequent revegetation activities.

    During plant processing activities, waste material and fines (minus ½ inch) from the crushing/screening operations are produced. These materials will be placed in the two proposed waste placement areas, which will be protected from erosion, final graded, and revegetated. Stockpiles of topsoil and the designated waste placement areas will be covered with coarse aggregate, planted with vegetative cover, or applied with magnesium-chloride (or equivalent) for protection from wind/water erosion, when necessary.

13. **REVEGETATION:** As portions of the project site are mined to a finished grade and will not be disturbed by continuing project activities, revegetation pursuant to the revegetation activities will be conducted as described in the "Revegetation Plan" prepared by LSA dated August 15, 2006 (see Appendix F). The areas to be reclaimed will be recontoured to final grades The surface will then be ripped to a depth of at least one-foot along the contour, covered in island patterns with available stockpiled topsoil material, and tilled to leave a rough surface. Prior to stockpile spreading, a soil analysis will be conducted to determine if the stored material meets the existing soil conditions on-site and if added soil amendments would improve the revegetation success. Broadcast seeding will then occur over the prepared surfaces utilizing only seeds and seeding rates that have proven successful in the revegetation test plots. Seeding will take place between November and January to take advantage of winter precipitation and eliminate the need for irrigation. Reclaimed areas will be clearly staked and flagged to eliminate additional disturbance from ongoing operations.

    <u>Baseline Vegetation</u>

    Baseline vegetation data was collected during March and April 2009 (see Appendix J-2). Precipitation this year, as recorded at the Palm Springs Airport, was 4.7 inches, which is about 90 percent of the long-term average of 5.2 inches. Therefore this sample should be representative of the long-term values. Measures were made of ground cover (projection of

aerial canopy) by native perennial plant species as well as their density (# of individual plants per unit area) and diversity (# of species).

Data was collected from the footprint of the planned Northwest Waste Placement Area and the southwest waste placement area surrounding the existing quarry which are undisturbed by mining. Data was collected using the point-intercept method. Rock was recorded when the diameter was greater than one inch. If rock had a diameter equal to or less than one inch it was recorded as soil. Soil was recorded when bare mineral soil was encountered by the point intercept. Litter includes remains of both annual and perennial vegetation and includes accumulation from an unknown number of years. Perennial native plants were recorded by species.

Ground cover averaged 15.8 per cent by perennial native plant species (ranged from about 9 to 20%). *Larrea tridentate, Encelia farinose* and *Amrosia dumosa* combined, provided 85 percent of the relative cover, that is 85 percent of all plant cover (15.8 percent of ground cover) was from these three species. The density of plants was 70 individual plants per 500 square meters and the total number of perennial plant species in the baseline was nine. The data is summarized in Table 4 below.

Table 4
Summary of Vegetation Baseline Data
Super Creek Quarry, March/April 2009

Ground Cover Type	Ground Cover Area (Percent)	Cover By Species (Percent)	No. of Plant Species
Rock (> 1" dia.)	7.8	NA	NA
Soil	36.2	NA	NA
Litter	40.2	NA	NA
Ambrosia dumosa (burrobush)	(3.3)	21	1
Encelia farinose (brittlebush)	(4.7)	30	1
Ephedra nevadensis (joint fir)	(0.3)	2	1
Eriogonum fasciculatum (buckwheat)	(0.3)	2	1
Juniperus californica (California juniper)	(0.5)	3	1
Larrea tridentate (creosote bush)	(5.3)	34	1
Lotus scoparius (deerweed)	(0.3)	2	1
Mirabilis coccinea	(0.3)	2	1
Psorothamnus arborescens	(0.3)	2	1
Subtotal: (Percentage of Native Perennial Species)	15.8	98[1]	9
Total	**100**	**NA**	**9**

[1]Total does not equal 100 due to rounding.
Source: "Revegetation Report" Kielhold, April 2009

The revegetation seed mix and seeding rates as recommended by OMR are listed in Table 5. Note that the species seeded may be updated per review of test results and will be

augmented with native annuals as recommended in the baseline study. Only native seeds tolerant to existing soil and rainfall conditions will be used.

Table 5
Revegetation Seed Mix
Super Creek Quarry

Common Name	Latin Name	Lbs. of Pure Live Seed per Acre
Creosote bush	*Larrea tridentata*	10
Burro bush	*Ambrosia dumosa*	4
California buckwheat	*Eriogonum fasciculatum*	4
Desert needlegrass	*Achnatherum speciosum*	4
Joint fir	*Ephedra nevadensis*	2
Brittlebush	*Encelia farinosa*	4
Deerweed	*Lotus scoparius*	2
Total		**30**

Revised per SMGB-OMR recommendations dated September 19, 2012.

Note that based on a recent price quote, needlegrass is very expensive and may be replaced with a similar, more available species. This seed mix is more appropriate for the waste placement areas and the Eastern Tailings Slopes. Burrobush will be used instead of rabbitbrush based on the transect data for future seeding. The Revegetation Plan, which has been prepared by LSA Associates, Inc., is enclosed as Appendix F and a Revegetation Report update is included in Appendix J-2.

The average precipitation in the area should be sufficient for seed germination and root establishment of native species. No irrigation or fertilization will be conducted, as native seeds are tolerant to existing temperatures, precipitation and soil conditions. Soil amendments will be added per the soil analysis results. Irrigation and fertilization also tend to encourage non-native invasive species.

Test Plots

Painted Hills established two island test plots with terraces on the East Tailings Slopes in the winter of 2008 – 2009 as shown on Sheet 1 and in Appendix J-2. Narrow horizontal benches or terraces a minimum of 2 to 3 feet wide at 25-foot intervals were cut into the face of the slope. The benches were partially covered with rock and then seeded with the specified seed mix. The terraces, erosion, and revegetation will be monitored at least once per year and if continued erosion is evident, then additional remediation measures will be undertaken. These may include the placing of additional rip-rap and straw wattles in lines where erosion is observed, construction of additional terraces, and reseeding. CHJ reviewed the narrow benches effect on slope stability and found that they would have no effect on slope stability (CHJ 2013). If determined to be successful, this method will be expanded in “islands” on the Eastern Tailings Slopes.

Future test plots will be established on a minimum of six-10 meter by 10 meter test plots including control or no seed areas for the rock slopes and planned waste placement areas. The plot areas shall be established in the vicinity of the Southwest Waste Placement Area and in the extreme northwest (after this area is final excavated). They shall be clearly identified in the field and protected with 3-wire fencing. The test plots will be maintained and monitored and tests conducted to refine planting techniques and seeding rates. Additional tests will be conducted if the initial tests and any active revegetation are not successful and may include various types and amounts of seeds and different soil preparation and amendments. The initial tests will determine if the rock surfaces can be made suitable for revegetation with additional breaking up of surface, adding available salvaged growth media and/or silt, and varying the plant species seeded.

Non-Native Invasive Species Control

The purpose of the weed or non-native invasive species control plan is to reduce or eliminate the occurrence of non-native invasive plant species that may invade the site where active and natural revegetation is taking place. Non-native invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation of the site.

The occurrence of weeds or non-native invasive species on-site shall be monitored by visual inspection. The goal is to prevent weeds from becoming established and depositing seeds in areas to be revegetated. No areas will be allowed to have more than 10 percent of the ground cover provided by non-native invasive plant species. If inspections reveal that weeds are becoming or have established on-site, then removal will be initiated. Inspections shall be made in conjunction with revegetation monitoring.

Weed removal will be accomplished through manual, mechanical or chemical methods depending on the specific circumstances. Reports of inspections and weed control implementation shall be part of the annual revegetation monitoring and kept on file by the operator. Russian thistle (*Salsola tragus*) and tamarisk will be monitored and removed (manually) for the first two years after a portion of the site is seeded.

Success Criteria

Successful revegetation will be achieved when a self-sustaining native plant cover is established in the disturbed areas of the proposed mining activity. The success of the revegetation effort will be determined through statistical comparison of the revegetated areas to the baseline inventory.

Acceptable performance standards for mine reclamation are based on a percentage of cover, density, and diversity when compared with the baseline. Acceptable success standards at the Super Creek Quarry per SMGB – OMR recommendations would be 35% of the baseline cover, 50% of the baseline density, and 50% of the baseline species richness or diversity five years after reclamation. Refer to Table 6 for Recommended Success Criteria.

Table 6
Super Creek Quarry
Recommended Revegetation Success Criteria

	Baseline	**Standard Success Percentage**	**Performance Standard or Success Criteria**
Cover	15.8% cover of native perennials	35%	5.5% cover of native perennials
Shrub Density	70 native perennials per 500 m^2 plot	50%	35 native perennials per 500 m^2
Species Diversity / Richness	9 native perennials species per 500 m^2 plot	50%	4 native perennials per 500 m^2

Revised per SMGB-OMR recommendations dated September 19, 2012.

The permanence and sustainability of the revegetated plant communities will be determined annually after the initial seeding. Annual assessments of the reclamation area will be conducted by a qualified botanist to determine the success of the revegetation effort. The plant species will be evaluated for relative success as determined by the cover, density, and diversity success criteria. Remedial actions include removing invasive exotic or non-native weed species and reseeding will be conducted based on annual assessment results. An evaluation of the surviving species will be repeated annually following initial seeding for five years or until the success criteria are achieved.

14. MONITORING AND MAINTENANCE:

a. Mining production accountability will be accomplished by performing pre- and post-certified surveys at 3-5 year intervals.

b. Throughout the life of the project, Painted Hills will continue to submit annual Mining Operation Reports to the SMGB and the BLM, as required by amendments to SMARA. The annual monitoring reports will assess existing conditions on-site including revegetation efforts, slope erosion, drainage controls, and safety measures and will provide recommendations to improve and /or remediate any deficiencies in these areas.

c. Monitoring of revegetation activities will occur annually during operations and following cessation of mining activities, until the established success criteria is met beginning one year after initial seeding or planting at any one site.

   Annual monitoring will include random transect sampling within revegetation areas. The number of transects and plots will vary in order to produce the 80% confidence level required under SMARA's Performance Standards for Revegetation. The following data will be collected within transects and plots:

- Survivorship: assessed by absolute counts
- Plant density
- Species richness or diversity
- Cover per specified area

All data will be recorded on a standard form and copies will be submitted as an appendix to each Annual Report. Permanent photo documentation stations will also be established for representative transects in order to visually document annual vegetation changes and community development. Monitoring reports will be produced annually summarizing the monitoring results, recommending any required remedial action (e.g. weed removal, reseeding, or erosion control), and evaluating whether the revegetation project is trending toward success as outlined in the Revegetation Plan. Once revegetation success criteria are met, a final report will be prepared confirming attainment of successful revegetation as specified in the Revegetation Plan. All monitoring reports will be furnished to the BLM and SMGB for review.

d. Monitoring of constructed erosion control measures should happen approximately one month before the onset of the rainy season and subsequently in conjunction with storm events. Many erosion control structures, such as a sediment basin or silt fence, require regular maintenance in order to function properly. The erosion control monitor shall specifically check for structures that are in need of maintenance or re-construction, blocked structures (such as with debris), under-designed structures, undermined structures, unanticipated surface flows, rilling or gullying on finished slopes, and evidence of deposition in watercourses off-site. If problems are noted, they shall immediately be repaired or additional remedial measures implemented. The erosion control designs recommended herein shall be evaluated for deterioration on a quarterly basis, as well as immediately before and after significant storm events. Erosion control features and materials such as wattles, water bars, and excelsior fencing, will deteriorate with time, and have been selected for their ability to do so, as well as for ease of maintenance. These features shall be replaced when they have deteriorated to approximately 50 percent of their original size and/or sediment capture effectiveness.

Maintenance requirements for rip-rap energy dissipation structures, lined channels and sediment basins include:

- Inspect erosion and sedimentation control measures prior to the rainy season, and after each significant rainfall event; when access allows;
- Inspect ditches and berms for washouts. Replace lost rip-rap, damaged channel linings or grade stabilizers as needed;
- Inspect channel linings, embankments, and beds of ditches and berms for erosion and accumulation of debris and sediment;
- Remove debris and sediment, and repair linings and embankments as needed;

- Check basin inlet and spillway structures for damage or obstructions;
- Stabilize erosion damage with additional rip-rap as needed; and
- Seasonally remove accumulated sediment from the basins when accumulation reaches 50 percent of the designated sediment storage volume of the basin.

Sedimentation basins shall have excess sediment removed when the basins reach 50 percent capacity. Armoring features such as rip-rap-covered areas on slopes or basin linings shall be augmented with additional rip-rap sufficient to maintain the protection for the surfaces being armored, per the design criteria established, and overflow features maintained to allow flow from one basin to the next per the design criteria.

The proposed inspection and maintenance procedures described herein, as well as the proposed erosion and sedimentation controls, have been incorporated into the site's updated SWPPP (see Appendix L). Monitoring of slopes, erosion control, revegetation and safety measures will also be accomplished by BLM and SMGB staff as part of their annual SMARA inspection and reporting.

e. Annual Slope Stability Monitoring:
A registered professional engineer or geologist will observe the heights and inclinations of all on-site slopes with respect to the mining and reclamation plan requirements. This observation would include an assessment of whether the slopes are within the permitted boundaries. Evidence for instability observed, such as tension cracks, deep-seated failures, shallow failures (including soil-slip type failures and rockfalls/toppling), and areas of significant erosion will be noted. Recommendations for mitigation of significant slope failure concerns would be included. Such measures could include removal of overburden, buttressing, slope flattening, slope removal, manual or equipment-based scaling of loose boulders, and minor re-grading to re-direct surface water flows. If a potential hazard to people or equipment is observed, then recommendations for protection of people and equipment will be provided.

A report would be prepared that documents the site observations, potential slope stability concerns, and recommended mitigation, if any, and included in the overall annual report.

Loose boulders encountered during mining should be removed from slope faces with on-site equipment. Unstable boulders left on slope faces above working benches should either be manually removed or, if accessible, removed by equipment. In the unlikely event that boulder removal should trigger larger area of observed instability, the engineering geologist should be notified so that the hazard can be evaluated. People and equipment should be protected from any toppling boulder hazards.

f. In order to verify assumptions with regards to strength parameters utilized in slope stability calculations for the Eastern Tailings Slopes, additional testing of tailings slope materials will be conducted prior to establishment of final slopes locations.

Specifically, additional tailings material sampling and strength testing will be conducted by a qualified professional when the quarry floor reaches elevation 2,150 feet. Samples will be collected from materials undisturbed by post-2008 mining as shown on cross-section B-B', Sheet 1 of the Plan. The results of such confirmation slope stability testing should be documented in a final slope stability report, and if changes to the Eastern Tailings Slope design are warranted, then the reclamation plan will be amended as required.

15. **RECLAMATION ASSURANCE:** A current financial assurance mechanism is in place to cover reclamation of all existing land disturbance (see Attachment 2 for the current Irrevocable Letter of Credit for the currently approved financial assurance and Appendix G for the financial assurance cost estimate (FACE)). Prior to commencement of the proposed project expansion activities, an updated FACE and a financial assurance mechanism will be approved to guarantee proper and thorough reclamation of any additional disturbance on the project site. This new assurance mechanism complies with Section 2773.1 of SMARA in the form of an irrevocable letter of credit, an approved form of financial assurance. This assurance will be reviewed and adjusted (if needed) on an annual basis.

ATTACHMENT 1
TOPOGRAPHIC SURVEY MAP
MASSARO & WELSH
2007

ATTACHMENT 2
IRREVOCABLE LETTER OF CREDIT FOR CURRENTLY APPROVED FINANCIAL ASSURANCE

PACIFIC PREMIER
BANK

May 18, 2012

State Mining and Geology Board
Attn: Will Arcand
801 K Street, MS 2405
Sacramento, CA 95814-3529

Re: Replacement of Letter of Credit No. 10015 with Letter of Credit No. 10019

Dear Mr. Arcand:

On or about November 19, 2011, Pacific Premier Bank issued Letter of Credit No. 10015 in favor of the Mining and Geology Board and the Department of Conservation (collectively "Beneficiaries"). We would now like to issue Letter of Credit No. 10019 as a replacement for Letter of Credit No. 10015. A copy of Letter of Credit No. 10015 (unsigned) has been enclosed for your reference.

I have also enclosed the original of Letter of Credit No. 10019, to be held in trust until the Beneficiaries return the original of Letter of Credit No. 10015 to my attention at the following address:

Pacific Premier Bank
Attn: Steven Arnold
1600 Sunflower Ave., 2nd Floor
Costa Mesa, CA 92626

Although I believe that Letter of Credit No. 10019 has already been approved by the Beneficiaries, if they should elect not to accept it as a replacement for Letter of Credit No. 10015, please have the original of Letter of Credit No. 10019 returned to my attention at the address indicated above.

If you should have any questions or need any additional information, please feel free to contact me at (714) 431-4010. Thank you again for your assistance with this transaction.

Sincerely,

Steven Arnold
General Counsel

PACIFIC PREMIER
BANK

May 18, 2012

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 10019

Beneficiaries:	State Mining and Geology Board 801 K Street, MS 2405 Sacramento, CA 95814-3529	California Department of Conservation Office of Mine Reclamation 801 K Street, MS 09-06 Sacramento, CA 95814-3529
Applicant:	Painted Hills Mining Company, a California corporation 58-645 Old Highway 60 Whitewater, CA 92282	
Amount:	US $138,742.00	
Expiration Date:	May 18, 2013 or any extended expiration date	
Re:	Surface Mining Permit No. RP 137, CA Mine #91-33-0003, Painted Hills Mine	

Gentlemen:

Pacific Premier Bank ("Bank") hereby issues this Irrevocable Letter of Credit No. 10019 in favor of the above Beneficiaries for the account of Applicant up to the aggregate sum of One Hundred Thirty Eight Thousand Seven Hundred Forty-Two and No/100 U.S. Dollars ($138,742.00) as security for the agreement entered into by Applicant with the Beneficiaries for the faithful performance of surface mining reclamation works in connection with the above mentioned surface mining permit.

Payment by the Bank to either Beneficiary is available upon any Beneficiary's presentation of a sight draft stating on such draft "drawn under Irrevocable Standby Letter of Credit No. 10019 of Pacific Premier Bank" and accompanied by the following signed and dated statement:

> "The accompanying draft in the amount of $_____ represents a sum due the California State Mining and Geology Board of the California Department of Conservation pursuant to California Public Resources Code Section No. 2773.1. The California State Mining and Geology Board or the California Department of Conservation has determined, following a public hearing, that Painted Hills Mining Company is financially incapable of performing reclamation in accordance with its approved reclamation plan (Surface Mining Permit No. RP 137) or has abandoned its surface mining operation without commencing or completing reclamation, has been provided with notice and an opportunity to cure, which cure period has expired, in accordance with Public Resource Code Section 2773.1, subdivision (b). A copy of this statement has been forwarded by certified mail to Painted Hills Mining Company."

This Letter of Credit expires at our office on May 18, 2013, but that date shall be automatically extended without written amendment to May 18th of each succeeding calendar year, unless the Bank sends at least

120 days advance written notice, by certified mail, return receipt requested, to the Beneficiaries at their addresses indicated above that the Bank elects not to renew this Letter of Credit beyond the date specified in such notice (the "Expiration Date"). All drafts and accompanying statements must be presented to the Bank on or before the Expiration Date. The Bank is not responsible for any impossibility or other difficulty in achieving strict compliance with the requirements of this Letter of Credit as written and the burden of strict compliance remains solely upon the Beneficiaries.

It is a further condition hereof that payment by the Bank to either Beneficiary is available during the last one hundred and eighty (180) days of the then current validity period upon any Beneficiary's presentation of a sight draft stating on such draft "drawn under Irrevocable Standby Letter of Credit No. 10019 of Pacific Premier Bank" and accompanied by the following signed and dated statement:

> "This certifies that we have received notice from Pacific Premier Bank that Irrevocable Letter of Credit No. 10019 will not be automatically extended without amendment. We have not received satisfactory evidence from Painted Hills Mining Company that adequate financial assurance will remain in effect upon the expiration of Irrevocable Letter of Credit No. 10019 as required by California Public Resources Code Section 2773.1 subdivision (a). A copy of this statement has been forwarded to Painted Hills Mining Company."

Partial draws on this Letter of Credit are permitted. The Bank will be fully discharged of its obligations under this Letter of Credit and will not be obligated to make any further payments under this Letter of Credit once the full amount of credit available under this Letter of Credit has been drawn.

The Bank hereby agrees that drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored up to the remaining amount of credit available under this Letter of Credit if presented for payment at the Bank's office at 1600 Sunflower Avenue, 2nd Floor, Costa Mesa, CA 92626 by no later than 4:00 pm (PT) of the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is issued subject to the International Standby Practices 1998 in addition to the laws of the State of California, including the Uniform Commercial Code, and International Chamber of Commerce rules pertaining to Uniform Customs and Practice for Documentary Credits (ICC Publication #500, 1993 revision).

Sincerely,

Michael Karr
EVP / Chief Credit Officer

ATTACHMENT 3
INTERIM MANAGEMENT PLAN

INTERIM MANAGEMENT PLAN
FOR
SUPER CREEK QUARRY

This Interim Management Plan (IMP) was prepared by Painted Hills Mining Company (Painted Hills) for the existing Super Creek Quarry (CA- 47363 and CA-39566) at the request of the BLM pursuant with 43 CFR § 3809.420 (b)(4) periods of non-operation.

The Plan of Operations anticipates continuous operation throughout its life (estimated at up to 25 years). However, economic or operational conditions may occur resulting in periods during which the operations become temporarily idle. Per SMARA, idle is defined to mean "curtailing surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date." As a contingency for this situation, the following information for interim management of the Super Creek Quarry has been prepared.

Mine Name; Operator; Designated Agent:

Super Creek Quarry
Operated under a Plan of Operation (CA-47363 and CA-39566) and
Reclamation Plan No. 137
CA MINE ID #91-33-003

Operated by:
Painted Hills Mining Company
58645 Old Highway 60
Whitewater, CA 92282
760-325-2747
Mr. Allan Bankus, Jr. – President, Designated Agent

Product: Decorative rock

Location: Approximately 2 miles north of Interstate 10 (I-10), east of the Whitewater River in the far western portion of the City of Desert Hot Springs in Riverside County. Super Creek Quarry site is situated on public lands under the jurisdiction of the BLM on unpatented claims in Section 36, Township 2 South, Range 3 East, SBBM and in assessor's parcel number 514-260-012.

Term of Non-Operation, Schedule for Closure

The mine is currently permitted active mine operation and is not considered idle. Painted Hills has no plans for closure in the foreseeable future. In the event that the operator curtails surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date, the local lead agency, the State Mining and Geology Board (SMGB), and the local BLM regional office in Palm Springs, will be notified within 90 days. Notification would include

the date of non-operation and expected period of non-operation. Reasons for non-operation would also be outlined. An updated written plan would be prepared and submitted in accordance with this IMP and SMARA.

Activities and facilities that will continue to be utilized during periods of non-operation will be described in writing and on the annotated plot plans at the time of non-operation. These would include reclamation activities, security, facilities maintenance, and equipment storage. Existing stockpiles may continue to be shipped until supplies are depleted.

(i) Measures to Stabilize Excavations and Workings

Erosion control measures identified in Plan of Operations and Reclamation Plan will be utilized for the Interim Management Plan. Operations and access roads will remain intact during the idle period. Any steepened operating quarry slopes will be cut back to 1.2H:1V or less and erosion control measures monitored and maintained.

Operations on-site will continue to comply with a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges associated with industrial activities and employ storm water BMPs. NPDES goals are to eliminate unauthorized non-storm water discharges, prepare an SWPPP, and monitor storm water discharges requirements. An updated draft SWPPP is included in Appendix L.

(ii) Measures to Isolate and Control Toxic or Deleterious Materials

All rock products and waste rock are naturally occurring rock. Chemicals or other hazardous materials are not utilized or produced during processing of materials at this site.

(iii) Provisions for Storage or Removal of Equipment, Supplies and Structures

Activities and facilities that will continue to be utilized during periods of non-operation will be described in writing and on the annotated plot plans at the time of non-operation. All supplies and mobile equipment will be removed from the site and stored in the fenced stockyard located at the retail shop 3.5 miles to the southwest. The portable water tank and gas tank will be either secured onsite or if operations are anticipated to be closed for an extended period also moved to the fenced stockyard.

The process plant will be secured onsite and locked and the gate on the access road locked.

(iv) Measures to Maintain the Project Area in a Safe and Clean Condition

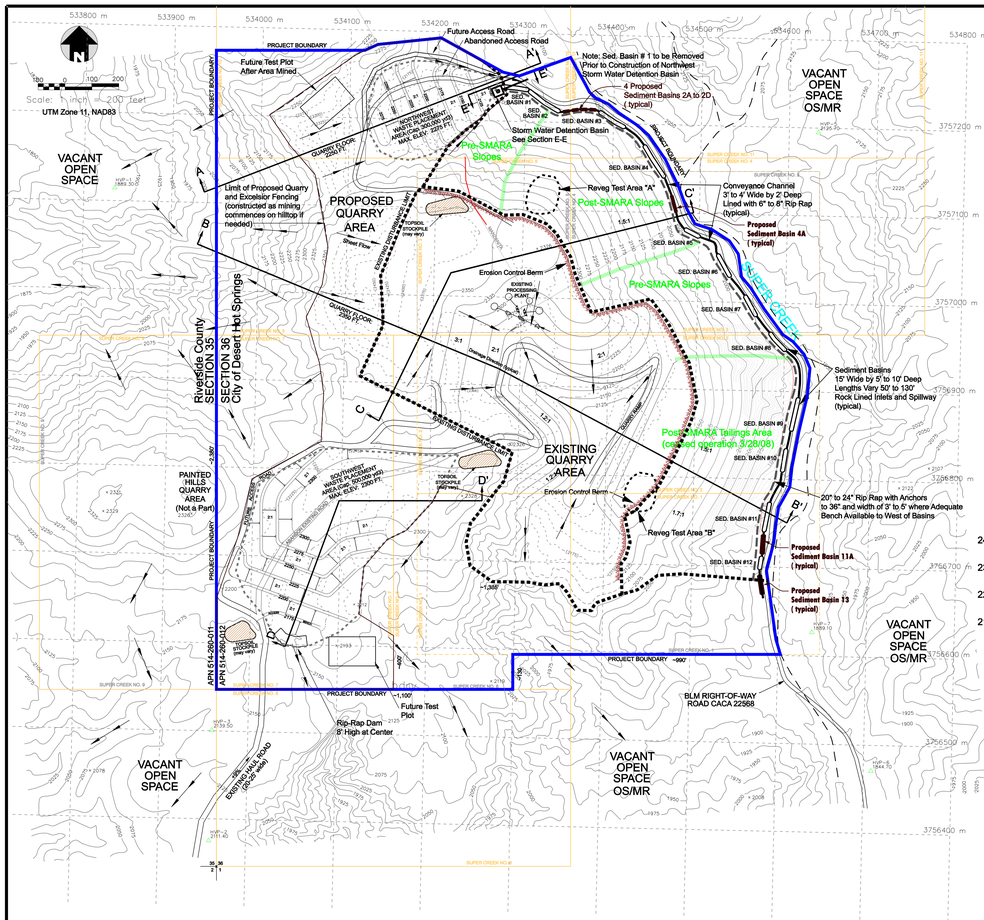
The road gates will be locked and the site inspected by Painted Hills' personnel at least once per week as personnel are located just 3.5 miles to the southwest. If needed, any trash illegally dumped will be removed. Erosion control facilities will continue to be monitored and maintained as listed in the Plan of Operations. Any revegetated areas will also be annually monitored and remediated as necessary.

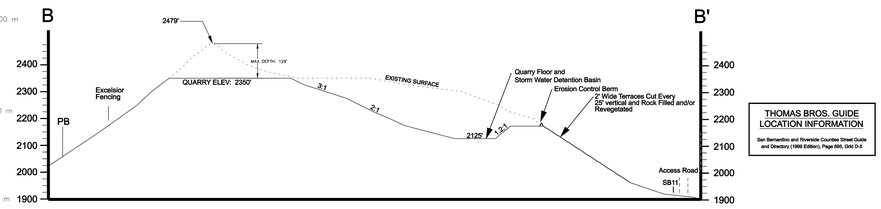
(v) Plans for Monitoring Site Conditions during Periods of Non-Operations

The site will be inspected by Painted Hills personnel at least once per week as personnel are located just 3.5 miles to the southwest. Site visits will inspect for any illegal activities such as broken gates, trash dumping and vandalism, and remove and repair as needed. They will inspect all erosion control facilities per the Plan of Operation in particular if any precipitation has occurred, and maintain said facilities as needed. Any revegetated areas will also be annually monitored and remediated as necessary. Lead agencies will be able to enter the site for inspection with notification.

(vi) Schedule for Temporary Closures

Painted Hills has no plans for closure in the foreseeable future. In the event that the operator curtails surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date, the local lead agency, the State Mining and Geology Board (SMGB), and the local BLM regional office in Palm Springs, will be notified within 90 days. Notification would include the date of non-operation and expected period of non-operation. Reasons for non-operation would also be outlined. An updated written IMP would be prepared and submitted similar this draft IMP.



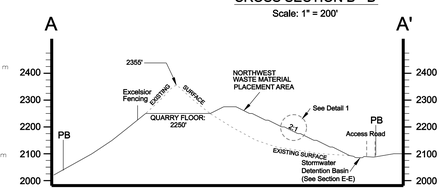


CROSS SECTION B - B'

Scale: 1" = 200'

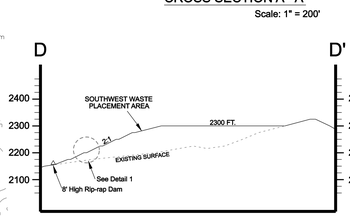
THOMAS BROS. GUIDE LOCATION INFORMATION

San Bernardino and Riverside Counties Street Guide and Directory (1998 Edition), Page 595, Grid D-5



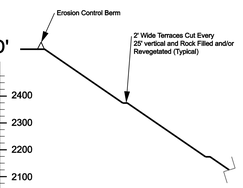
CROSS SECTION A - A'

Scale: 1" = 200'



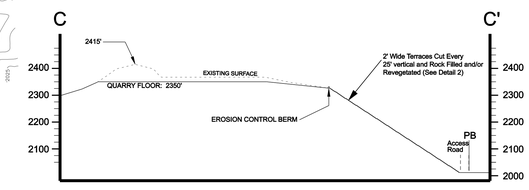
CROSS SECTION D - D'

Scale: 1" = 200'



DETAIL 2

Not to Scale



CROSS SECTION C - C'

Scale: 1" = 200'

PAINTED HILLS MINING COMPANY MINING PLAN NOTES

1) This map encompasses the vested mining operations on, and totally surrounded by public lands administered by the Bureau of Land Management (BLM) subject to reclamation per the California Surface and Mining Reclamation Act of 1976 (SMARA), as amended.

2) This site is a vested mining operation permitted prior to 1976 SMARA by the BLM. This plan proposes a 95.2-acre project area - 56 acres of quarries and waste stockpiles; 12 acres to remain relatively undisturbed; and 27 acres of inactive eastern waste material slopes undergoing reclamation.

3) Mineral to be mined: Decorative Rock

4) It is proposed to mine decorative rock reserves for 25 years at this site. Mining will cease in approximately the year 2038.

5) Access to the mine site is via an existing, vested pre-SMARA BLM unpaved haul road (RCJW Grant CA-22568), as shown.

6) The project site is situated on one land parcel (APN 514-260-012, 620.07 acres). Painted Hills Mining Company maintains several mining claims covering the project area, as shown.

7) Access to the quarry area(s) will be via 20-30 foot wide ramps with grades of 15% or less, depending on conditions.

8) Very limited overburden material covers the undisturbed excavation areas. Up to 12 inches surface material or topsoil shall be salvaged in clearly marked stockpiles as shown on plan and protected from erosion by covering with larger coarse aggregate or planted with a native vegetative cover.

9) The areas to be mined (maximum quarry depths will be 130 to 150 feet) and waste rock/ tailings placement areas are as shown.

10) Existing decorative rock reserves of approximately 1.25 million tons will be mined over the next 25 years at an average extraction rate of 50,000 tons.

11) The quarry is mined in 25-foot cuts using dozi May, 2009 (Appendix H3) that push materials into a raw material stockpile. Quarry slopes will be mined to no steeper than 1.2:1 (horizontal: vertical) and will adhere to the recommendations included within the Slope Stability Investigation prepared by CHJ, Inc. in February 2011 and May 2012 (Appendices H-1 and H-2). The portable crushing/screening plant is fed directly from the raw materials stockpile using loaders. Material is then crushed, screened and stockpiled according to material size.

12) Decorative rock product (1/2" – 3" size) is transported from the quarry site to Whitewater Rock's retail yard approximately 2 miles to the south via over-the road haul trucks of 20-tons capacity. An average of 5-8 truck trips per day will be used over the life of the project.

13) Mining waste (material smaller than ½") produced by the project generally averages up to 50% of the raw material extracted. During past operations, this material was placed east of the quarry area, which was ceased as of March 28, 2008. This plan proposes two designated waste placement areas to accept all future tailings/fines. The proposed waste rock placement areas will be final graded to no steeper than 2:1 per recommendations included within the Slope Stability Investigation.

14) Groundwater will not be encountered during mining. Estimated depth to groundwater is 1,075 feet amsl below the minimum proposed quarry elevation of 2,125 feet amsl.

15) Rainfall onto the quarry area will be retained within the confines of the quarry area through the use of perimeter berming, grading and/or quarry floor depression/retention areas as needed. Rainfall directly onto the waste placement areas and western slope area will be controlled using straw wattles across the slopes, water bars armored with straw wattles, excelsior fencing (where appropriate), and detention basins at the bottom of the waste placement areas. These measures will be maintained throughout the life of the mine. For additional information on erosion control details, see cross sections and the Erosion Control Design Plan in Appendix I.

16) An existing offsite well (located at Painted Hills stock yard) provides water for dust suppression activities including spraying of roads, active quarry operations and stockpiles. Water will continue to be imported to the quarry site using a 4,000 gallon water truck and stored on-site in a 5,000 gallon tank used for water sprays on the processing equipment.

17) No processing chemicals are proposed. Fuel, oil, lubricants, etc. used onsite will continue to be appropriately handled, stored and disposed. Most maintenance of mining equipment occurs off-site at Whitewater Rock's retail yard, however, minor equipment maintenance activities and refueling occurs occasionally at the quarry site via a fuel and maintenance trucks.

18) No blasting or storage of explosives on-site is proposed at this time.

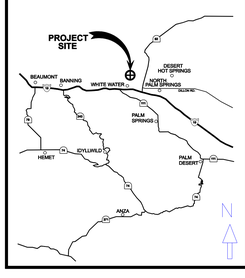
19) Access to the site will continue to be controlled by a locking gate located approximately ½ mile south of the quarry site. No additional, gates, fences, walls, free-standing signs, additional driveways, curbs, storm channels, additional well sites, parks or trees are proposed.

20) Hours of operations will continue to be daylight hours, Monday through Friday, 12 months per year.

21) The Eastern Waste Material Slopes were utilized to deposit waste material per the approved 1993 Supplemental Reclamation Plan and have been determined to be stable per CHJ 2012. Active deposition of waste onto these slopes was terminated in March 2008. Reclamation of these slopes to reduce and limit erosion of the fine materials is ongoing including construction of 12 sedimentation basins and rip-rap placement at base of slope, reduction of material at top of slopes, rock placement into rills, future construction of cross terraces parallel to slope contours, and revegetation.

22) Sedimentation basins and other erosion control measures shall be monitored prior to rainy season and after any rainfall greater than 0.50 inches. Accumulated sediment shall be removed to restore basins to full design volume prior to rainy season and at the other times when basins are filled to 50% or more. Straw wattles determined to be no longer effective will be replaced as needed.

LOCATION MAP

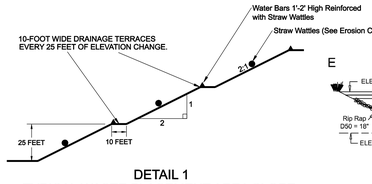


SITE INFORMATION

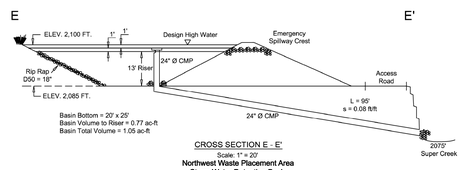
EXISTING QUARRY AREA:	23.8 Acres
Existing Eastern Waste Tailings Slopes:	27 Acres
PROPOSED EXPANSION AREA:	33.4 Acres
Undisturbed West Slopes	12.0 Acres
Undisturbed South Area	9.0 Acres
TOTAL PROJECT AREA :	105.2 Acres
ASSESSOR'S PARCEL NUMBER(s):	514-260-012-0001

LEGAL DESCRIPTION:
The possessory interest and all other rights, title and interest in and to land and improvements thereon described as Super Creek #1 through #7, Super Creek #10 and #11, and the Manzanita claims in Sections 35 and 36, Township 2 South, Range 3 East, SBBM.

UTILITIES
Telephone - Mobile Service
Water - Offsite Well
Electricity - Diesel Generator
Gas - None
Sewer - Portable Toilets



DETAIL 1
TYPICAL WASTE PLACEMENT AREA SLOPE
Scale: N.T.S.



CROSS SECTION E - E'
Scale: 1" = 20'
Northwest Waste Placement Area
Storm Water Detention Basin

LEGEND

- PROJECT BOUNDARY
- EXISTING DISTURBANCE LIMIT
- EXISTING CONTOUR
- DRAINAGE FLOW DIRECTION
- PB PROJECT BOUNDARY

REGISTERED PROFESSIONAL ENGINEER — ALAN D. EDMONDS — No. 38104 — Exp. 03-31-13 — CIVIL — STATE OF CALIFORNIA

NO.	DATE	REVISION	BY
1	11/2008	Added Erosion Control Measures; Included Eastern Tailings Area in Rec. Plan; Revised Acreages	MD
2	05/2009	Update Erosion Control Measures Details; Added UTM and Scale Bar.	MD
3	10/2012	Update per CHJ (May 2012) and SMGB Recommendations (Sept. 2012).	MD
4	01/2013	Revised Project Boundary and Revised Sediment Basins	

LILBURN CORPORATION
1905 Business Center Drive San Bernardino, CA 92408
909.890.1818 Fax 909.890.1809

Super Creek Quarry Expansion
BLM PLAN OF OPERATIONS and RECLAMATION PLAN

MINERAL: Decorative Rock

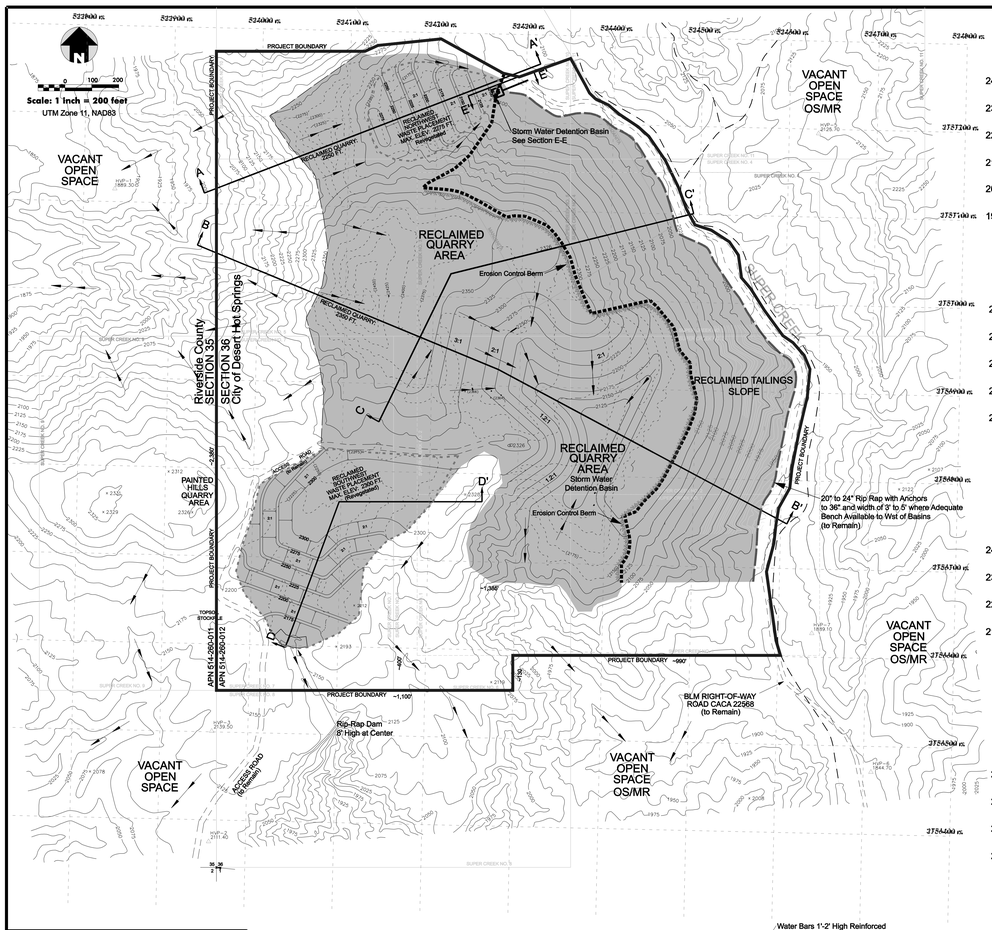
APPLICANT: OPERATOR:	Painted Hills Mining Company 58645 Old Highway 60 Whitewater, California 92282	(760) 325-2747
MINERAL RIGHTS: LANDOWNER:	Bureau of Land Management 1201 Bird Center Drive Palm Springs, California 92262	(760) 833-7103
MINING ENGINEER: MAP PREPARER: REPRESENTATIVE:	Lilburn Corporation 1905 Business Center Drive San Bernardino, CA 92408	(909) 890-1818
MAP SOURCE: CONTOUR INTERVAL:	USGS 7.5' Quad: White Water & Desert Hot Springs, CA 25 Feet	

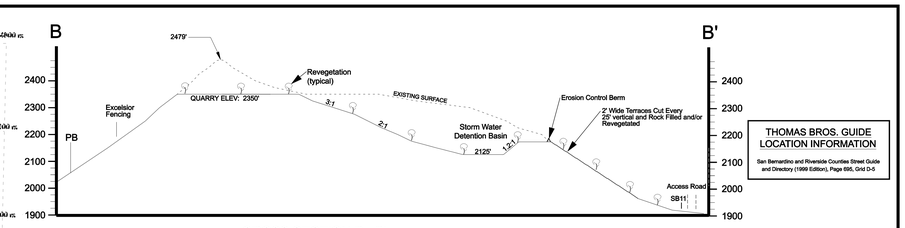
Scale: 1" = 200'
Date: Jan. 17, 2013
Revisions by: Lilburn Corp., M. Derus, T. Goodwalt
Designed by: G. Webber

REVISION REFERENCE		
NO.	DATE	BY
1	11/2008	GW
2	05/2009	MD
3	10/2012	MD
4	01/2013	MD

SHEET 1 of 2

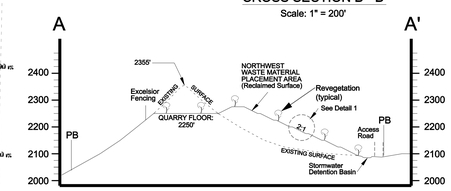
...\WIW-2008SuperCreekExpansion-Sh 1/31/2014 11:01:31 AM





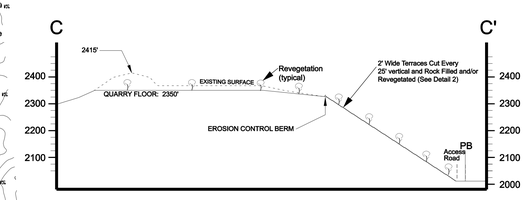
CROSS SECTION B - B'

Scale: 1" = 200'



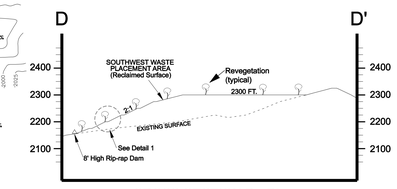
CROSS SECTION A - A'

Scale: 1" = 200'



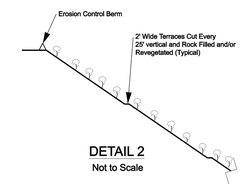
CROSS SECTION C - C'

Scale: 1" = 200'



CROSS SECTION D - D'

Scale: 1" = 200'



DETAIL 2

Not to Scale

PAINTED HILLS MINING COMPANY RECLAMATION PLAN NOTES

1) This plan proposes mining of decorative rock reserves for 25 years. Mining will be completed in approximately the year 2038 (25 years from approval of revision); final reclamation will commence upon cessation of mining, and will be completed within five years by 2043.

2) Access to the site is via an existing vested pre-SMARA BLM unpaved haul road as shown. This road will remain after reclamation activities for the BLM's use.

3) The total project area subject to reclamation is 83.2 acres – 56.2 acres of quarry and waste stockpile areas and 27 acres of the eastern waste material slopes (12 acres on west to remain mostly undisturbed).

4) The proposed final use of the mine site is wildlife habitat and open space under the jurisdiction of the BLM.

5) Quarry rock slopes will be final-graded to no steeper than 1.2:1 (horizontal: vertical) with maximum depths of 130 to 150 feet by CHJ (February 2011).

6) Waste placement area slopes will be final graded to no steeper than 2:1, with 10-foot terraces installed every 25 feet of vertical height of the slope. Water bars will be located on the benches and the stockpiles will be revegetated.

6) Erosion control features will be utilized during final reclamation and include: final grading of all project areas to acceptable factors of safety, revegetation activities, straw wattles across the slopes; water bars armored with wattles; excelsior fencing; and detention basins. These features will be constructed as needed based on actual runoff conditions.

7) Reclamation/revegetation will include regrading as necessary to achieve planned slopes, ripping compacted surfaces and roads, adding any stockpiled surface material containing banked seeds and available silt in "island" patterns, broadcast seeding with native seeds, and monitoring reclaimed areas for erosion and revegetation success. Reclaimed areas will be clearly staked and flagged to eliminate additional disturbance from ongoing operations.

8) Within one year of the completion of mining, all stockpiles, process plants, equipment, tanks, and infrastructure will be removed from the site. Scrap material, refuse, and surplus materials will be removed and disposed of at an appropriate landfill or recycled if possible.

9) The access gate will remain as shown with posted "No Trespassing" and "Danger" signs to limit unauthorized access to the site.

10) All revegetation activities will be accomplished in coordination with a qualified biologist knowledgeable in the local flora environment.

11) Seeding will take place between November and January to take advantage of winter precipitation and eliminate the need for irrigation. Prior to stockpile spreading, a soil analysis will be conducted to determine if added soil amendments would improve the revegetation success. Only seeds and seeding rates that have proven successful in the revegetation test plots will be utilized.

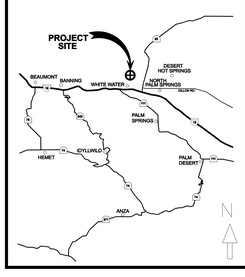
12) The proposed revegetation seed mix and seeding rates are listed below for the quarry slopes, stockpiles, and fill slopes. Note that the species seeded will be augmented with native annuals as recommended in the baseline study. Only native seeds tolerant to existing soil and rainfall conditions will be used.

Revegetation Seed Mix
Super Creek Quarry

Common Name	Latin Name	Lbs. of Pure Live Seed per Acre
Creosote bush	*Larrea tridentata*	10
Burro bush	*Ambrosia dumosa*	4
California buckwheat	*Eriogonum fasciculatum*	4
Desert needlegrass	*Achnatherum speciosum*	4
Joint fir	*Ephedra nevadensis*	2
Brittlebush	*Enwelia farinosa*	4
Deer-weed	*Lotus scoparius*	2
Total		**30**

Revised per SMGB-DMR recommendations dated September 19, 2012.
(Final seed list subject to seed availability and future test plot findings).

LOCATION MAP



SITE INFORMATION

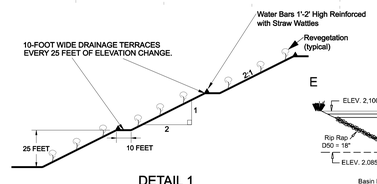
RECLAIMED QUARRY AREA:	56.2 Acres
Reclaimed Eastern Waste Tailings Slopes:	27 Acres
Undisturbed West Slopes	12 Acres
Undisturbed South Area	9 Acres
TOTAL PROJECT AREA :	105.2 Acres
ASSESSOR'S PARCEL NUMBER(s):	514-260-012-0001

LEGAL DESCRIPTION:

The possessory interest and all other rights, title and interest in and to land and improvements thereon described as Super Creek #1 through #7, Super Creek #10 and #11, and the Monzanita claims in Sections 35 and 36, Township 2 South, Range 3 East, SBBM

UTILITIES

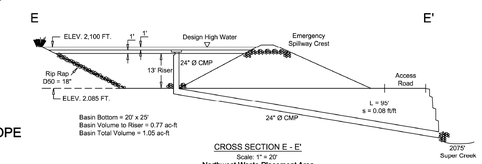
Telephone - Mobile Service
Water - Offsite Well
Electricity - Diesel Generator
Gas - None
Sewer - Portable Toilets



DETAIL 1

TYPICAL WASTE PLACEMENT AREA SLOPE

Scale: N.T.S.



CROSS SECTION E - E'

Scale: 1" = 20'

Northwest Waste Placement Area
Storm Water Detention Basin

LEGEND

- PROJECT BOUNDARY
- QUARRY/TAILINGS BOUNDARY
- EXISTING CONTOUR
- DRAINAGE FLOW DIRECTION
- PB — PROJECT BOUNDARY
- AREA TO BE RECLAIMED AND REVEGETATED (APPROXIMATELY 83 AC)

REGISTERED PROFESSIONAL ENGINEER — NAZAN D. ELKADI — No. 38104 — Exp. 03-31-13 — CIVIL — STATE OF CALIFORNIA

Super Creek Quarry Expansion
BLM PLAN OF OPERATIONS and RECLAMATION PLAN

MINERAL:	Decorative Rock
APPLICANT: OPERATOR:	Painted Hills Mining Company 58645 Old Highway 60 Whitewater, California 92282 (760) 325-2747
MINERAL RIGHTS: LANDOWNER:	Bureau of Land Management 1201 Bird Center Drive Palm Springs, California 92262 (760) 833-7103
MINING ENGINEER: MAP PREPARER: REPRESENTATIVE:	Lilburn Corporation 1905 Business Center Drive San Bernardino, CA 92408 (909) 890-1818
MAP SOURCE: CONTOUR INTERVAL:	USGS 7.5' Quad: White Water & Desert Hot Springs, CA 25 Feet

NO.	DATE	REVISION	BY
1	11/2008	Added Erosion Control Measures; Included Eastern Tailings Area in Rec. Plan; Revised Acreages	MD
2	05/2009	Update Erosion Control Measures Details; Added UTM and Scale Bar.	MD
3	10/2012	Update per CHJ (May 2012) and SMGB Recommendations (Sept. 2012).	MD
4	01/2013	Revised Project Boundary	

LILBURN CORPORATION
1905 Business Center Drive San Bernardino, CA 92408
909.890.1818 Fax 909.890.1809

Scale: 1" = 200'
Date: Jan., 17 2013
Revision by: N. Deras, T. Goodwell
Designed by: G. Webber

REVISION REFERENCE		
NO.	DATE	BY
1	11/2008	GW
2	05/2009	MD
3	10/2012	MD
4	01/2013	MD

SHEET 2 of 2

PACIFIC PREMIER
BANK

May 18, 2012

State Mining and Geology Board
Attn: Will Arcand
801 K Street, MS 2405
Sacramento, CA 95814-3529

Re: Replacement of Letter of Credit No. 10015 with Letter of Credit No. 10019

Dear Mr. Arcand:

On or about November 19, 2011, Pacific Premier Bank issued Letter of Credit No. 10015 in favor of the Mining and Geology Board and the Department of Conservation (collectively "Beneficiaries"). We would now like to issue Letter of Credit No. 10019 as a replacement for Letter of Credit No. 10015. A copy of Letter of Credit No. 10015 (unsigned) has been enclosed for your reference.

I have also enclosed the original of Letter of Credit No. 10019, to be held in trust until the Beneficiaries return the original of Letter of Credit No. 10015 to my attention at the following address:

Pacific Premier Bank
Attn: Steven Arnold
1600 Sunflower Ave., 2nd Floor
Costa Mesa, CA 92626

Although I believe that Letter of Credit No. 10019 has already been approved by the Beneficiaries, if they should elect not to accept it as a replacement for Letter of Credit No. 10015, please have the original of Letter of Credit No. 10019 returned to my attention at the address indicated above.

If you should have any questions or need any additional information, please feel free to contact me at (714) 431-4010. Thank you again for your assistance with this transaction.

Sincerely,

Steven Arnold
General Counsel

PACIFIC PREMIER
BANK

May 18, 2012

IRREVOCABLE STANDBY LETTER OF CREDIT NO. 10019

Beneficiaries:	State Mining and Geology Board 801 K Street, MS 2405 Sacramento, CA 95814-3529	California Department of Conservation Office of Mine Reclamation 801 K Street, MS 09-06 Sacramento, CA 95814-3529
Applicant:	Painted Hills Mining Company, a California corporation 58-645 Old Highway 60 Whitewater, CA 92282	
Amount:	US $138,742.00	
Expiration Date:	May 18, 2013 or any extended expiration date	
Re:	Surface Mining Permit No. RP 137, CA Mine #91-33-0003, Painted Hills Mine	

Gentlemen:

Pacific Premier Bank ("Bank") hereby issues this Irrevocable Letter of Credit No. 10019 in favor of the above Beneficiaries for the account of Applicant up to the aggregate sum of One Hundred Thirty Eight Thousand Seven Hundred Forty-Two and No/100 U.S. Dollars ($138,742.00) as security for the agreement entered into by Applicant with the Beneficiaries for the faithful performance of surface mining reclamation works in connection with the above mentioned surface mining permit.

Payment by the Bank to either Beneficiary is available upon any Beneficiary's presentation of a sight draft stating on such draft "drawn under Irrevocable Standby Letter of Credit No. 10019 of Pacific Premier Bank" and accompanied by the following signed and dated statement:

> "The accompanying draft in the amount of $_____ represents a sum due the California State Mining and Geology Board of the California Department of Conservation pursuant to California Public Resources Code Section No. 2773.1. The California State Mining and Geology Board or the California Department of Conservation has determined, following a public hearing, that Painted Hills Mining Company is financially incapable of performing reclamation in accordance with its approved reclamation plan (Surface Mining Permit No. RP 137) or has abandoned its surface mining operation without commencing or completing reclamation, has been provided with notice and an opportunity to cure, which cure period has expired, in accordance with Public Resource Code Section 2773.1, subdivision (b). A copy of this statement has been forwarded by certified mail to Painted Hills Mining Company."

This Letter of Credit expires at our office on May 18, 2013, but that date shall be automatically extended without written amendment to May 18th of each succeeding calendar year, unless the Bank sends at least

120 days advance written notice, by certified mail, return receipt requested, to the Beneficiaries at their addresses indicated above that the Bank elects not to renew this Letter of Credit beyond the date specified in such notice (the "Expiration Date"). All drafts and accompanying statements must be presented to the Bank on or before the Expiration Date. The Bank is not responsible for any impossibility or other difficulty in achieving strict compliance with the requirements of this Letter of Credit as written and the burden of strict compliance remains solely upon the Beneficiaries.

It is a further condition hereof that payment by the Bank to either Beneficiary is available during the last one hundred and eighty (180) days of the then current validity period upon any Beneficiary's presentation of a sight draft stating on such draft "drawn under Irrevocable Standby Letter of Credit No. 10019 of Pacific Premier Bank" and accompanied by the following signed and dated statement:

> "This certifies that we have received notice from Pacific Premier Bank that Irrevocable Letter of Credit No. 10019 will not be automatically extended without amendment. We have not received satisfactory evidence from Painted Hills Mining Company that adequate financial assurance will remain in effect upon the expiration of Irrevocable Letter of Credit No. 10019 as required by California Public Resources Code Section 2773.1 subdivision (a). A copy of this statement has been forwarded to Painted Hills Mining Company."

Partial draws on this Letter of Credit are permitted. The Bank will be fully discharged of its obligations under this Letter of Credit and will not be obligated to make any further payments under this Letter of Credit once the full amount of credit available under this Letter of Credit has been drawn.

The Bank hereby agrees that drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored up to the remaining amount of credit available under this Letter of Credit if presented for payment at the Bank's office at 1600 Sunflower Avenue, 2nd Floor, Costa Mesa, CA 92626 by no later than 4:00 pm (PT) of the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is issued subject to the International Standby Practices 1998 in addition to the laws of the State of California, including the Uniform Commercial Code, and International Chamber of Commerce rules pertaining to Uniform Customs and Practice for Documentary Credits (ICC Publication #500, 1993 revision).

Sincerely,

Michael Karr
EVP / Chief Credit Officer

INTERIM MANAGEMENT PLAN
FOR
SUPER CREEK QUARRY

This Interim Management Plan (IMP) was prepared by Painted Hills Mining Company (Painted Hills) for the existing Super Creek Quarry (CA- 47363 and CA-39566) at the request of the BLM pursuant with 43 CFR § 3809.420 (b)(4) periods of non-operation.

The Plan of Operations anticipates continuous operation throughout its life (estimated at up to 25 years). However, economic or operational conditions may occur resulting in periods during which the operations become temporarily idle. Per SMARA, idle is defined to mean "curtailing surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date." As a contingency for this situation, the following information for interim management of the Super Creek Quarry has been prepared.

Mine Name; Operator; Designated Agent:

Super Creek Quarry
Operated under a Plan of Operation (CA-47363 and CA-39566) and
Reclamation Plan No. 137
CA MINE ID #91-33-003

Operated by:
Painted Hills Mining Company
58645 Old Highway 60
Whitewater, CA 92282
760-325-2747
Mr. Allan Bankus, Jr. – President, Designated Agent

Product: Decorative rock

Location: Approximately 2 miles north of Interstate 10 (I-10), east of the Whitewater River in the far western portion of the City of Desert Hot Springs in Riverside County. Super Creek Quarry site is situated on public lands under the jurisdiction of the BLM on unpatented claims in Section 36, Township 2 South, Range 3 East, SBBM and in assessor's parcel number 514-260-012.

Term of Non-Operation, Schedule for Closure

The mine is currently permitted active mine operation and is not considered idle. Painted Hills has no plans for closure in the foreseeable future. In the event that the operator curtails surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date, the local lead agency, the State Mining and Geology Board (SMGB), and the local BLM regional office in Palm Springs, will be notified within 90 days. Notification would include

the date of non-operation and expected period of non-operation. Reasons for non-operation would also be outlined. An updated written plan would be prepared and submitted in accordance with this IMP and SMARA.

Activities and facilities that will continue to be utilized during periods of non-operation will be described in writing and on the annotated plot plans at the time of non-operation. These would include reclamation activities, security, facilities maintenance, and equipment storage. Existing stockpiles may continue to be shipped until supplies are depleted.

(i) Measures to Stabilize Excavations and Workings

Erosion control measures identified in Plan of Operations and Reclamation Plan will be utilized for the Interim Management Plan. Operations and access roads will remain intact during the idle period. Any steepened operating quarry slopes will be cut back to 1.2H:1V or less and erosion control measures monitored and maintained.

Operations on-site will continue to comply with a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges associated with industrial activities and employ storm water BMPs. NPDES goals are to eliminate unauthorized non-storm water discharges, prepare an SWPPP, and monitor storm water discharges requirements. An updated draft SWPPP is included in Appendix L.

(ii) Measures to Isolate and Control Toxic or Deleterious Materials

All rock products and waste rock are naturally occurring rock. Chemicals or other hazardous materials are not utilized or produced during processing of materials at this site.

(iii) Provisions for Storage or Removal of Equipment, Supplies and Structures

Activities and facilities that will continue to be utilized during periods of non-operation will be described in writing and on the annotated plot plans at the time of non-operation. All supplies and mobile equipment will be removed from the site and stored in the fenced stockyard located at the retail shop 3.5 miles to the southwest. The portable water tank and gas tank will be either secured onsite or if operations are anticipated to be closed for an extended period also moved to the fenced stockyard.

The process plant will be secured onsite and locked and the gate on the access road locked.

(iv) Measures to Maintain the Project Area in a Safe and Clean Condition

The road gates will be locked and the site inspected by Painted Hills' personnel at least once per week as personnel are located just 3.5 miles to the southwest. If needed, any trash illegally dumped will be removed. Erosion control facilities will continue to be monitored and maintained as listed in the Plan of Operations. Any revegetated areas will also be annually monitored and remediated as necessary.

(v) Plans for Monitoring Site Conditions during Periods of Non-Operations

The site will be inspected by Painted Hills personnel at least once per week as personnel are located just 3.5 miles to the southwest. Site visits will inspect for any illegal activities such as broken gates, trash dumping and vandalism, and remove and repair as needed. They will inspect all erosion control facilities per the Plan of Operation in particular if any precipitation has occurred, and maintain said facilities as needed. Any revegetated areas will also be annually monitored and remediated as necessary. Lead agencies will be able to enter the site for inspection with notification.

(vi) Schedule for Temporary Closures

Painted Hills has no plans for closure in the foreseeable future. In the event that the operator curtails surface mining operations by more than 90 percent of the operation's previous maximum annual mineral production for a period of one or more years with the intent to resume those surface operations at a future date, the local lead agency, the State Mining and Geology Board (SMGB), and the local BLM regional office in Palm Springs, will be notified within 90 days. Notification would include the date of non-operation and expected period of non-operation. Reasons for non-operation would also be outlined. An updated written IMP would be prepared and submitted similar this draft IMP.