

FINAL ENVIRONMENTAL IMPACT REPORT

LAS PILITAS QUARRY CONDITIONAL USE PERMIT AND RECLAMATION PLAN

Volume I

Executive Summary, Section 1.0 through 8.0

Prepared for:

San Luis Obispo County
Department of Planning and Building



Prepared by:

URS Corporation

URS



SCH#2010071013

November 2014



DEPARTMENT OF PLANNING AND BUILDING

Promoting the Wise Use of Land – Helping to Build Great Communities

TO: Interested Party
DATE: November 10, 2014
FROM: Murry Wilson, Environmental Resource Specialist / EIR Manager
VIA: Ellen Carroll, Planning Manager / Environmental Coordinator
SUBJECT: Las Pilitas Quarry CUP and Reclamation Plan – Notice of Availability of Final EIR (DRC2009-00025)

The Final Environmental Impact Report (FEIR) for the Las Pilitas Quarry Conditional Use Permit and Reclamation Plan is complete and available for review. The FEIR addresses the environmental impacts associated with the request to allow mining and the phased reclamation of 41 acres on an approximately 234 acre site. The applicant is requesting a maximum annual production rate of 500,000 tons, a portion of which will be recycled asphalt and Portland cement concrete. The site is in the North County Planning Area, Las Pilitas Sub Area, within the EX1 (Extractive Resource Area) combining designation.

The proposed project is within the Rural Lands land use category and is located at 6660 Calf Canyon Road (north side of Highway 58), east of the Salinas River Bridge and approximately 1/4 mile west of the Parkhill Road intersection, east of the community of Santa Margarita.

ENVIRONMENTAL IMPACTS:

The EIR focuses on the following issues: Aesthetics and Visual Resources, Agricultural Resources, Air Quality, Greenhouse Gases, Biological Resources, Geology, Hazards and Hazardous Materials, Noise, Public Services and Utilities, Recreation, Transportation and Circulation, Wastewater, and Water Quality and Supply. The EIR also considers alternatives in addition to the “No Project” alternative.

HOW TO GET MORE INFORMATION:

Copies of the Final EIR are available at the following locations: Santa Margarita Library, Cal Poly Library, and City / County Library of San Luis Obispo. Copies are also available on loan and for review at the Planning Department, located at the 976 Osos St., Room 200, San Luis Obispo, 93408-2040. The Final EIR is on the Planning Department’s web site at: www.sloplanning.org under “Environmental Impact Reports” under the link “Oster / Las Pilitas Quarry Conditional Use Permit”.

If you need more information about this project, please contact **Murry Wilson** at (805) 788-2352 (or e-mail: mwilson@co.slo.ca.us).

PUBLIC HEARING:

A public hearing before the San Luis Obispo Planning Commission has been tentatively scheduled for **December 11, 2014**, in the Board of Supervisors Chambers, County Government Center, San Luis Obispo. If you plan to attend, please check the Planning Department’s website approximately one to two weeks before this date to verify.

Las Pilitas Quarry Conditional Use Permit and Reclamation Plan

Final Environmental Impact Report

DRC 2009-0025

SCH# 2010071013

Volume 1 of 3

Prepared for:

San Luis Obispo County

Department of Planning and Building

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION AND SUMMARY OF ACTIONS

This Final Environmental Impact Report (EIR) assesses the environmental effects from the Las Pilitas Quarry proposed by Las Pilitas Resources LLC, on land owned by the Oster family. The project will require approval of a Conditional Use Permit (CUP) and Reclamation Plan by San Luis Obispo County. The County case number is: DRC2009-00025. The proposed quarry and related improvements would occupy ~~41~~ 48 acres within the 234 acre property which is located in the Las Pilitas Planning Area north of State Route 58 (SR 58) and east of the Salinas River, approximately three miles east of the community of Santa Margarita. The property is designated Rural Lands and is covered by the EX1 (Extractive Resource Area) Combining Designation which extends over a large portion of the Las Pilitas Planning Area in recognition of the aggregate resources present in the La Panza granitic rocks there.

The County of San Luis Obispo Department of Planning and Building has prepared this EIR as the Lead Agency under the California Environmental Quality Act (CEQA). Responsible Agencies or other agencies with review authority over the project include:

- California Department of Conservation, Office of Mine Reclamation (review of Reclamation Plan)
- California Department of Resources Recycling and Recovery (CalRecycle – review and enforcement for recycled concrete operation)
- State Water Resources Control Board and Regional Water Quality Control Board (review and enforcement related to management of stormwater discharges and authority over any other water or waste discharges)
- California Department of Fish and Game (review and agreement for any streambed alteration)
- California Department of Transportation (approval of any encroachment permit for work within state highway right-of-way)
- California Public Utilities Commission (CPUC – review of any future improvements affecting railroad right-of-way at road crossing)
- U.S. Army Corps of Engineers (review of potential discharges or effects on jurisdictional waters or wetlands)
- County Air Pollution Control District (review of construction related emissions, and authority over any stationary point sources)

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ES.2 CEQA PROCESS FOR THIS PROJECT

The revised CUP application for this project was received by the County on March 22, 2010. A CEQA Initial Study was prepared and concluded that the project may have a significant impact on the environment. The Initial Study was circulated with a Notice of Preparation that an EIR would be prepared on July 1, 2010. In response to the NOP, eleven letters were received by the Department of Planning and Building. The NOP, and these letters, along with other related correspondence, are included in this EIR as Appendix A.

On July 8, 2010, the County staff conducted a public Scoping Meeting. Twenty-four persons provided comments and suggestions on the physical impacts to be discussed in the forthcoming Draft EIR.

The Draft EIR was released for agency and public review for the period from April 5, 2013 to May 20, 2013. After completion of the public review period, all comments received were reviewed and written responses were prepared, along with any necessary revisions to the Final EIR. All of this information is presented in Section 9.0 of the Final EIR and associated changes are also shown in the text of the Final EIR in a track changes format. The County Planning Commission at a noticed public hearing will then consider approval of the CUP and Reclamation Plan, using the information presented in the Final EIR.

ES.3 BRIEF SUMMARY OF PROPOSED PROJECT

Figure ES-1 shows the location and major features of the project. Access to the property is directly from SR 58, and an access road about 700 feet in length would lead from the highway to the quarry entrance. A key component of the project design is retention of two ridgelines on either side of the quarry entrance (shown in Figure ES-1). From the entrance point, the initial quarry operation would cut through an east-west oriented ridgeline (Phases 1A and 1B) in order to reach the central portion of the property where the main quarry area is located. Benched slopes created during Phases 1A and 1B, as well as the more distant slopes in later phases of the operations would be visible from a portion of SR 58 about one mile southwest from the site. Some residences in this vicinity may also have partial views into the quarry. The preserved ridges on either side of the entrance would help to block or obscure some views into the property, as will oaks and other trees in the vicinity. No residences east of the property along Parkhill Road will have views of the quarry operations. Subsequent quarry activities will consist of clearing, quarrying and reclamation through Phases 2 and 3.

The project will produce up to 500,000 tons per year of aggregate material ~~for use in Portland cement concrete (PCC) and asphaltic concrete (AC)~~. Aggregate products that will be sold include: rip rap, drain rock, landscape wall rock, decorative rock, decomposed granite for landscaping applications (trail pathways, etc.), road base, and non-expansive fill material. “Washing” (i.e., wet processing) is not required for any of these aggregate materials, and this process is therefore not evaluated in this EIR. In the event that aggregate material washing is

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proposed in the future, additional CEQA review would be required. The proposal does not include a hot plant for mixing asphaltic concrete, but it would include a storage area for recycled roadway ~~PCC and AC~~ pavement and concrete that will be crushed and sold as road base within the 500,000-ton-per-year permit limit. Depending on market conditions, the life of the quarry is estimated to range from 25 to 58 years. If the full production rate is achieved, then the average daily truck traffic associated with the project would range from 198 to 273 trips per day; this range is discussed further in Section 2.3.3.

The project is expected to require drilling and blasting as part of the quarry operations. Crushing and sorting of the produced rock would occur with portable equipment brought on to the property several times per year for that purpose. Water use for the quarry project, estimated at 5,500 gallons per day (including 1,000 gpd for irrigation), would be supplied from an existing shallow well on the Oster property drawing riparian water from the Salinas River.

The Reclamation Plan proposes to cover and revegetate slopes in phases as the quarry proceeds. A mix containing predominantly native species would be used along with minimal irrigation and monitoring/maintenance to promote the success of the revegetation. Final reclamation will include smoothing interior slopes, removing the access road, and revegetating the remaining disturbed areas. The project will also preserve about 69 acres of native habitat including riparian, oak woodland, and chaparral vegetation in a permanent open space to compensate for the loss of biological habitat in the quarry.

Additional details regarding the project are contained in Section 2 of the EIR.

ES.4 ENVIRONMENTAL CONSEQUENCES OF THE PROJECT

Based on the information and analysis in this EIR, the project will have a significant and unmitigable impact on aesthetics by affecting views in the vicinity, particularly for eastbound travelers on SR 58, which is identified as a suggested scenic corridor in the Conservation and Open Space Element of the General Plan. The project will also have localized significant and not mitigable noise impacts related to blasting and quarry operations, during portions of the quarry development when these noise sources are not shielded by intervening topography. In addition, the heavy truck traffic from the project will increase noise levels at residential locations along SR 58 in Santa Margarita—also considered a significant and not mitigable impact. In a similar fashion, the project generated truck traffic will also contribute towards cumulative noise impacts that would be significant and unmitigable at some residential locations along SR 58 in Santa Margarita.

Emissions of criteria air pollutants (reactive organic gases, nitrogen oxides and fine particulate matter) are considered significant ~~and unmitigable~~ impacts that can be mitigated based on the applicable criteria used by the Air Pollution Control District. Finally, cumulative traffic volumes on SR 58 through Santa Margarita are also considered significant

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and not mitigable, due to uncertainty in financing, right-of-way acquisition and other matters affecting future roadway and intersection improvements.

Each of the topical subsections throughout Section 4 of this EIR discusses cumulative effects. The degree of detail in each discussion varies depending on the issue and approach used in the evaluation. With or without the project, traffic volumes are expected to increase along SR 58 to the point where a signal will be warranted at its intersection of Camino Estrada with El Camino Real. The proposed quarry will contribute towards this impact, and a proportional contribution towards mitigating that impact will be required.

Section 5 of the EIR summarizes the cumulative impact discussions from the environmental topics presented in Section 4.

For many other issues, potential environmental impacts are identified in the EIR along with mitigation measures that will reduce the effects to a level below what is considered significant. And for some issues, the effects of the project are found to be less than significant without any special conditions or mitigation measures. Section ES.6 describes the various impacts and mitigation measures presented in the EIR.

Several alternatives to the proposed quarry are considered in the EIR. These include a No Project alternative, seven alternative locations, three alternative access routes, and other possible changes. While some of these alternatives may have a reduced aesthetic impact because they are not visible from SR 58, they would all have some adverse visual impact and they would all have the same types of operational effects.

ES.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The aesthetic impact of the project was noted above in Section ES.4. The appearance of quarry slopes along with the nature of quarry activities including heavy equipment operation, blasting, and the crushing and sorting of rock, are all aspects of the project that are opposed by some residents in the vicinity and larger community. The project design, mitigation measures, and CUP conditions of approval can minimize these effects. The phased Reclamation Plan proposed will provide a naturalized appearance at the project site, but the quarry lifetime will be several decades.

Issues of most concern to the public, as reflected in the NOP comments, include the increase of heavy truck traffic that would travel on SR 58 into and through Santa Margarita. While the issue is important, the physical effects of the project traffic—when evaluated using standard measures of Level of Service, acceleration patterns, turning radius, roadway maintenance, and similar procedures—would be less than significant. Public concern, however, is directed at the size of trucks and the perceived effects they may have at sensitive traffic locations, such as the Santa Margarita Elementary School crossing on SR 58 (Estrada Avenue) at H Street. The EIR discusses these locations and concerns, and in some cases identifies

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mitigation measures to minimize potential conflicts within the community. Future traffic growth will also necessitate improvements at the intersection of SR 58 and El Camino Real. The project will contribute towards this need, and is required to contribute a proportionate share towards the improvement of the intersection. Cooperation between the County and Caltrans, and review by the CPUC for the adjacent railroad crossing, will be necessary along with the participation of other developers in the community in order to mitigate future cumulative traffic impacts at this intersection.

Noise generated by the normal quarry operations is expected to comply with applicable County standards with the imposition of mitigation measures identified in this EIR, but will still be audible at nearby residences. Infrequent blasting noise, expected one to two times per month (up to twenty times per year), may exceed the County numerical standard. These noise aspects of the project, along with its contribution to cumulative traffic noise within specific locations in Santa Margarita, are significant and unmitigable impacts.

Certain air quality impacts are also considered significant but mitigable ~~and unmitigable~~ based on the analysis within this EIR and direction from the San Luis Obispo Air Pollution Control District. Subsequent review and permitting by the Air Pollution Control District ~~may identify~~ has identified additional measures that will serve to reduce or offset emissions ~~further and potentially reduce the identified significant air quality impacts to less than significant levels after subsequent review of the final mitigation measures proposed by the applicant.~~

Throughout the topics in Section 4, consistency with land use and other policies is discussed and in some cases policies with which the project would be potentially inconsistent are identified. The larger issue of land use compatibility is summarized in Section 4.14, along with a listing of Applicant Proposed Measures intended to help improve the compatibility of heavy truck traffic along the SR 58 through Santa Margarita. The final decision with respect to land use compatibility, however, will be made by the Planning Commission and/or Board of Supervisors in their consideration of the project's Conditional Use Permit and Reclamation Plan.

ES.6 SUMMARY OF IMPACTS AND MITIGATION MEASURES

This section consists of a series of tables that contain the results of the impact assessment for all topics addressed in this EIR. It is organized into a series of five tables as follows:

- Table ES-1 Lists potentially significant environmental impacts that can be fully mitigated to a level below significance, as described in Section 21081(a) (1) of CEQA.
- Table ES-2 Lists those environmental impacts that cannot be mitigated by the County of San Luis Obispo, and which will remain significant and not mitigable if the project is approved.
- Table ES-3 Lists effects that have been found to be less than significant. Some of these issues were determined to be less than significant through the Initial Study-Notice of Preparation and EIR scoping process. These included: Cultural Resources, and Population and Housing. Other issues and effects in this table were determined to be less than significant in the EIR analysis.
- Table ES-4a Presents the summary land use analysis for the area surrounding the proposed quarry site.
- Table ES-4b Presents the summary land use analysis for the Santa Margarita community, including a listing of the Applicant Proposed Measures to reduce land use incompatibility.

**TABLE ES-1
IMPACTS WHICH CAN BE MITIGATED BY THE COUNTY OF SAN LUIS OBISPO**

The following impacts would be feasibly mitigated by implementation of the identified mitigation measures, in accordance with Section 21081(a) (1) of CEQA. For each of these impacts, the residual effect after implementation of the mitigation measures will be less than significant.

Description of Impact	Mitigation Measures
<p>IMPACT AES-3: Nighttime Glare. The project will create a new source of nighttime lighting in the vicinity, which may generate glare visible to residences on properties to the south or southwest.</p>	<p>MM AES-3: Lighting Plan. Prior to the issuance of a building permit for the project scale house, the applicant/quarry operator shall provide a plan or specifications for <u>all lighting (including security lighting)</u> that complies with the County Land Use Ordinance for approval by the County Planning and Building Department. <u>All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from SR 58.</u></p>
<p>IMPACT AG-2: Introduction of Invasive Species. Ground disturbance and regular movement of vehicles into and out of the property, and revegetation efforts during reclamation, will increase the potential for an introduction of invasive weed species. These weed species may impair the agricultural use of other properties near the project.</p>	<p>MM AG-2: Introduction of Invasive Species. Prior to the issuance of the Notice to Proceed, the applicant shall incorporate a Weed Control Program into the Operational Plan and Reclamation Plan for County review and approval. The Weed Control Plan shall include methods, success criteria and a monitoring and reporting program to the satisfaction of the County.</p>
<p>IMPACT AG-3: Dust Generation. Dust will be generated during the quarry development and use which could adversely affect agricultural resources.</p>	<p>MM AG-3: Dust Generation. Mitigation Measure AQ-1b serves as adequate mitigation for Impact AG-3.</p>
<p>IMPACT AQ-1a: Emissions of ROG+NO_x. <u>Operations at the quarry at the planned production rate of 500,000 tons per year would generate combined emissions of Reactive Organic Gases (ROG) and nitrogen oxides (NO_x) in excess of the daily and annual SLOAPCD thresholds defining a significant impact for these ozone precursors.</u></p>	<p>MM AQ-1a: Emissions of ROG+NO_x. <u>Prior to issuance of a Notice to Proceed for the first phase of the quarry operation, the applicant or quarry operator shall provide evidence to the Department of Planning and Building that an acceptable set of measures to reduce ROG+NO_x emissions has been approved by the SLOAPCD. The Quarry operator shall comply with the following on-site requirements for this project to minimize ROG+NO_x emissions, or achieve equivalent reductions through measures approved by the SLOAPCD:</u></p> <ol style="list-style-type: none"> <u>1. Blasting shall not be conducted on days when portable aggregate processing equipment is in operation.</u> <u>2. On and off-road diesel equipment shall not idle for more than 5 minutes. Signs</u>

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Description of Impact	Mitigation Measures
	<p><u>shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit.</u></p> <p>3. <u>If not required by other regulations (CARB on-road or off-road diesel requirements), transport operations conducted by the quarry operator shall be restricted to trucks with 2007 model year engines or newer trucks.</u></p> <p>4. <u>Use Best Available Control Technology (BACT) measures for construction activities as follows:</u></p> <ul style="list-style-type: none"> • <u>Further reducing emissions by expanding use of Tier 3 and Tier 4 off-road and 2010 on-road compliant engines;</u> • <u>Repowering equipment with the cleanest engines available; and</u> • <u>Installing California Verified Diesel Emission Control Strategies. These strategies are listed at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</u> <p>5. <u>If the combination of these requirements does not meet the standard of 25 pounds per day of ROG+NO_x, then the applicant or quarry operator shall comply with a combination of certain off site requirements presented in Section 3.8.3 of the "CEQA Air Quality Handbook (April 2012)" prepared by the SLOAPCD, and/or additional measures in a Construction Activities Management Plan (CAMP) described in Section 4.5 of the same Handbook, to achieve this standard to the satisfaction of the SLOAPCD. This requirement may include funding and implementation of off site mitigation measures consistent with the existing SLOAPCD program described in Section 3.8.3 of the same Handbook.</u></p> <p>5. <u>Prior to issuance of a Notice to Proceed for the first phase of the quarry operation, the applicant or quarry operator shall prepurchase off-site ROG + NO_x mitigation from the SLOCAPCD, as outlined in the approved Activity Management Plan (AMP) and based on the then-in-place pricing under the Carl Moyer Grant Program. Thereafter, the project operator shall report to the SLOCAPCD as stated in the approved AMP. If applicant determines on-road diesel truck engine model years are not available and/or cannot be verified, applicant agrees to use the San Luis Obispo County on-road diesel truck fleet average emission factor and a total count of truck trips. SLOCAPCD shall then utilize this information to invoice the project operator in accordance with its off-site mitigation program any emissions deemed to exceed APCD thresholds during the reporting period. Copies</u></p>

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	<p><u>of all reports, invoices, and payments under this program shall be provided to the Department of Planning and Building for verification and audit.</u></p> <p><u>6. The Activity Management Plan (AMP) shall include, but not be limited to the following elements:</u></p> <ul style="list-style-type: none"> <u>a. General project phase schedule and a description of activities and all project generated emissions, including vehicle haul trips, blasting, recycling, off-road vehicle activity and diesel equipment.</u> <u>b. Description of mitigation measures, including all equipment emission reduction measures.</u> <u>c. A timeline for submittal of quarterly reports.</u> <u>d. A section describing contents of quarterly reports. Include a description of the tracking mechanism to ensure the truck engine model year is as stated in the AMP. Describe the use of the weigh scale software in tracking vehicle trips. Include the contact person(s) responsible for monitoring. Provide phone, email and mailing address of responsible contact person.</u> <p><u>7. The quarterly reports shall include, but not be limited to the following elements:</u></p> <ul style="list-style-type: none"> <u>a. Tabulation of on and off-road equipment used during the reporting period (age/model year, horsepower, engine tier, miles and/or hours of operation).</u> <u>b. Tabulation of on-road truck trips and hours of use for off-road equipment, blasting activity.</u>
<p><u>IMPACT AQ-1b: Emissions of PM₁₀ Fugitive Dust. Operations at the quarry at a production rate of 500,000 tons per year would generate emissions of PM₁₀ fugitive dust in excess of the daily SLOAPCD thresholds defining a significant impact for this criteria pollutant. The fugitive dust emissions would not exceed the annual threshold.</u></p>	<p><u>MM AQ-1b: Emissions of PM₁₀ Fugitive Dust. In addition to compliance with MM AQ-1a, the Quarry operator shall The Quarry operator comply with the following on-site requirements for this project to minimize PM₁₀ fugitive dust emissions:</u></p> <ul style="list-style-type: none"> <u>1. Reduce the amount of disturbed area where possible, by retaining the natural vegetation and soil within each quarry phase until that phase is ready to start.</u> <u>2. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.</u> <u>3. All soil or product stockpile areas should be sprayed daily as needed, or be covered or treated to minimize windblown dust.</u>

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	<p>4. <u>The project access drive should be completed and paved prior to the start of quarry operations and the operation of heavy trucks on the property for aggregate sales purposes.</u></p> <p>5. <u>Locations for stockpiles and material storage areas, along with specifications for dust control measures, shall be shown on all applicable construction and mining plans.</u></p> <p>6. <u>The quarry operator shall designate a person to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and phone number of such person shall be provided to the SLOAPCD prior to issuance of Notice to Proceed or other permit to initiate work on the project.</u></p> <p>7. <u>Reclamation and revegetation of all disturbed areas shall occur as soon as practicable in a phased manner consistent with the project plans. Watering or other treatments shall be used on replaced soil material to control windblown dust until vegetation is established.</u></p> <p>8. <u>All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD.</u></p> <p>9. <u>Vehicle speed for all quarry vehicles and trucks on unpaved portions of the operations area shall not exceed 15 mph.</u></p> <p>10. <u>All trucks hauling dirt, sand, soil, or other loose materials are to be covered, fitted with appropriate seals and splash guards, and must be operated in conformance with California Vehicle Code 23114 related to hauling materials.</u></p> <p>11. <u>Sweep streets at the end of each day if visible soil material is carried onto the project access road. Water sweepers with reclaimed water should be used where feasible.</u></p> <p>12. <u>Prior to commencement of any construction activities (e.g., site preparation, grading or construction activities) the applicant will notify the County Department of Planning and Building and the SLOAPCD, by letter, of the status of the air quality measures outlined above. The letter will state the following:</u></p>

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	<p>a) <u>The controls that will be implemented;</u></p> <p>b) <u>The reasons why any unimplemented measures are considered infeasible and the measures incorporated to substitute for these measures; and</u></p> <p>c) <u>When scheduled construction activities will be initiated to allow for SLOAPCD inspection of the mitigation measures.</u></p> <p>13. <u>At all times during construction and operation of the quarry, the operator shall prevent visible emissions in excess of the limits prescribed in SLOAPCD Rule 401 and avoid causing any nuisance as prohibited in Rule 402.</u></p>
<p>IMPACT AQ-2a: Emissions of DPM. The project operations will emit diesel particulate matter (DPM) above the daily SLOAPCD threshold. Modeling of the long term carcinogenic effects of DPM, and other carcinogens that may be released in small amounts, indicate that the unmitigated increase in potential cancer risk may be higher than the SLOAPCD health risk threshold.</p>	<p>MM AQ-2a: Emissions of DPM. Mitigation Measure AQ-1a serves as adequate mitigation for Impact AQ-2a.</p>
<p>IMPACT AQ-2b: Naturally Occurring Asbestos. The project will involve grading and soil removal and quarrying of the underlying rock. If Naturally Occurring Asbestos (NOA) were present, it could be disturbed and emitted into the air where it could expose workers or nearby residents to this toxic air contaminant.</p>	<p>MM AQ-2b: Naturally Occurring Asbestos. Prior to the issuance of the Notice to Proceed or related permit to start construction on the project, the quarry operator shall submit evidence to the Department of Planning and Building, that either an exemption has been granted by the SLOAPCD, or the provisions of the CARB Air Toxic Control Measure related to NOA have been implemented.</p>
<p>IMPACT BIO-1: Effect on Rare Plants. The quarry project, through construction and/or ongoing quarry operations, will result in the loss of populations of seven plant species considered sensitive by the CNPS or of concern to San Luis Obispo County. This loss is considered a potential significant impact.</p>	<p>MM BIO-1: Effect on Rare Plants. Prior to issuance of the Notice to Proceed for the quarry project, the applicant/quarry operator shall identify and permanently preserve 69 acres of habitat land on-site, consistent with the areas shown in Figure 4.5-1. To ensure this preservation, the applicant shall record an open space easement that protects the habitat in perpetuity. The open space easement shall be controlled by a qualified conservation organization approved by the County. Potential conservation organizations include but are not limited to: The Nature Conservancy, San Luis Obispo Land Conservancy, or Greenspace.</p>
<p>IMPACT BIO-2: Effect on Wildlife Species. Habitat for several animals considered Species of Special Concern by the California Department of Fish and Wildlife, and Birds of Conservation Concern by the U.S. Fish and Wildlife Service will be directly removed or affected by the quarry project.</p>	<p>MM BIO-2: Effect on Wildlife Species. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-2.</p>
<p>IMPACT BIO-3: Effect on Ringtail Cat. The quarry project, through construction</p>	<p>MM BIO-3: Effect on Ringtail Cat. If vegetation clearing will occur during the ringtail</p>

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<p>and/or ongoing quarry operations, may adversely impact the ringtail cat, which is a California Fully Protected Species. Specifically, vegetation clearing during the ringtail cat breeding season (March 1 through June 30) has the potential to result in the mortality of ringtail cats, which would be a significant impact.</p>	<p>cat breeding season (March 1 through June 30), a qualified biologist will conduct focused searches for potential dens within areas that are proposed for clearing and grading. Any active dens will be protected with a suitable buffer based on location, and types of activity with the area as determined by the qualified biologist. Once the young have left the den or the breeding attempt has failed, as determined by a qualified biologist, normal vegetation clearing activities may resume.</p>
<p>IMPACT BIO-4: Effect on Birds. The quarry project, through construction and/or ongoing quarry operations, may adversely impact native birds and their active nests, which are protected under the Migratory Bird Treaty Act (MBTA), administered by the US Fish and Wildlife Service. Specifically, vegetation clearing during the bird breeding season (March 1 through June 30) has the potential to result in the mortality of eggs or nestlings of native birds.</p>	<p>MM BIO-4: Effect on Birds. If vegetation clearing will occur during the bird breeding season (March 1 through June 30), a qualified biologist will conduct focused searches for nesting birds of the affected areas and adjacent areas within 200 feet of the affected areas, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained. All active native bird nests will be protected with a suitable buffer based on the species of bird, nest location, and types of activity with the area as determined by the qualified biologist. Once the young have fledged or the nest has failed, as determined by a qualified biologist, the nest will be removed and normal activities may resume.</p>
<p>IMPACT BIO-5: Effect on Bats. The quarry project, through construction and/or ongoing quarry operations, may adversely impact the Pallid bat and its roost, or one of three other species all of which are California Species of Special Concern. Removal of trees or rocks with crevices or pockets where bats are roosting would be considered a significant impact on these species.</p>	<p>MM BIO-5: Effect on Bats. <u>Prior to issuance of a notice to proceed with each phase of the quarry, the quarry operator shall retain a qualified biologist to conduct a survey for bats that may be roosting in trees, rock crevices or other locations.</u></p> <p>If bat roosts are identified within the quarry during active operations, a qualified biologist will work to displace the bats using passive techniques. If quarry operations are stopped for greater than 30 days, a qualified biologist will survey the quarry for bat roosts prior to restarting quarry operations. After three nights of relocation efforts or after the qualified biologist has determined that the area is clear of bats, quarry operations may resume.</p>

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<p>IMPACT BIO-6: Effect on California Red Legged Frog (CRLF). The project, through grading into the main drainage in Phase 2 of the quarry could impact creek or pond habitat used by CRLF – a species listed as threatened by the U.S. Fish and Wildlife Service and as a Species of Special Concern by the California Department of Fish and Wildlife. Any impacts to CRLF would be considered significant.</p>	<p>MM BIO-6: Effect on California Red Legged Frog (CRLF). Prior to authorization to proceed with Phase 2 of the quarry, or any preparatory work that would impact the main drainage located in the Phase 2 area, the quarry operator shall retain a qualified biologist to conduct a habitat assessment and/or protocol survey for CRLF in accordance with guidance published by the U.S. Fish and Wildlife Service current at the time. If CRLF is determined to be present, the quarry operator shall either modify the project design and implementation to avoid any take of the species, or obtain the appropriate permit or authorization from USFWS to allow any specified take of the species. Evidence of compliance with USFWS requirements shall be provided to the Department of Planning and Building prior to the issuance of a Notice to Proceed for Phase 2A of the quarry, or related clearing and grading work.</p>
<p>IMPACT BIO-7: Effect on Oak Trees. The Quarry project will have a potentially significant impact by the direct removal of 44 mature (i.e., greater than five inches in diameter at breast height) oak trees.</p>	<p>MM BIO-7: Effect on Oak Trees. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-7, since the areas to be preserved in open space include approximately 200 mature oak trees in their associated habitats.</p>
<p>IMPACT BIO-8: Effect of Dust on Plants. The proposed quarry will generate dust which could impact the health and vigor of native vegetation.</p>	<p>MM BIO-8: Effect of Dust on Plants. Mitigation AQ-1b serves as adequate mitigation for Impact BIO-8.</p>
<p>IMPACT BIO-9: Effects on Vegetation and Habitat. The quarry project will result in a loss of 2.35 acres of sensitive habitat, within a total disturbance area of 40.29 acres. This habitat loss is considered a potential significant impact.</p>	<p>MM BIO-9: Effects on Vegetation and Habitat. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-9. The area preserved as open space in Mitigation BIO-1 would include 9.66 acres of sensitive habitats within a total of 68.82 acres of permanent open space.</p>
<p>IMPACT BIO-10: Effect on Wetland or Riparian Habitat. The Quarry project will adversely impact (remove) approximately 0.25 acre of Seasonally Flooded Vernal Swale, which may be wetland or riparian habitat.</p>	<p>MM BIO-10: Effect on Wetland or Riparian Habitat. The project design includes preservation of approximately 0.45 acre of the drainage in question, plus the creation of a 0.75 acre detention basin adjacent to the preserved portion of the drainage, and other detention basins within the quarry site. Prior to County issuance of a Notice to Proceed to commence quarry activities, the quarry operator shall provide a copy of an approved California Department of Fish and Game Streambed Alteration Agreement or a written determination that such an agreement is not necessary.</p>
<p>IMPACT GEO-1: Potential Slope Instability. The project may create unstable slopes if fracture patterns or other discontinuities in the underlying granitic rock are of a type and orientation that would adversely affect the designed slopes.</p>	<p>MM GEO-1: Potential Slope Instability. The applicant/quarry operator shall supplement the Engineering Geology Investigation prepared by Geosolutions (2009) to address potential fractures or other discontinuities and their effect on final slope stability. If warranted by the supplemental investigation, the applicant shall also</p>

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	submit a revised quarry design, Reclamation Plan and slope stability analysis consistent with requirements of the Surface Mine and Reclamation Act. Any changes shall be reflected in the final Mining Plan, prior to Notice to Proceed.
<p>IMPACT GEO-3: Soil Erosion and Loss of Topsoil. The project will create graded slopes into natural hillsides and remove natural vegetation and topsoil, which may increase soil erosion and sediment transport.</p>	<p>MM GEO-3: Soil Erosion and Loss of Topsoil. Vegetation and topsoil removed from the areas to be quarried shall be managed as described in the Reclamation Plan, as approved by the County. (Additional measures to minimize erosion and protect surface water form sediment discharge are described in Mitigation Measures WQ-1a and 1b).</p>
<p>IMPACT GEO-4: Changes in Surface Runoff and Drainage Patterns. The project will grade and quarry an area of approximately 41 acres, draining towards Moreno Creek (entrance road and Phases 1A and 1B), and in the northern unnamed creek drainage towards the Salinas River. Substantial and adverse on- or off-site erosion effects may occur.</p>	<p>MM GEO-4: Changes in Surface Runoff and Drainage Patterns. The detention basins and other drainage control features depicted in the project plans (Sheets 12 and 13 in plans dated September 9, 2009, or equivalent sheets in final plans) shall be installed as early as practicable in their associated construction phases, and shall be maintained throughout the life of the quarry operation. (Additional measures to minimize erosion and protect surface water form sediment discharge are described in Mitigation Measures WQ-1a and WQ-1b).</p>
<p>IMPACT HAZ-1a: Risk of Explosion or Release of Explosive Material - Transportation. The Project could create a hazard to the public or the environment through inadvertent explosion during the transportation of explosives.</p>	<p>MM HAZ-1a: Risk of Explosion or Release of Explosive Material – Transportation. In accordance with the Blast Plan and as required by federal, state and local regulations, the Blaster and/or explosive delivery company must show evidence of compliance with the following requirements:</p> <ul style="list-style-type: none"> • Copy of drivers current CDL with HAZMAT endorsement, • Current USDOT HAZMAT Certification of Registration, • Maintain a current California HAZMAT Transportation License, • Current enrollment in a drug screening program according to USDOT CFR Title 49 regulations, and • Maintain a general liability insurance policy for explosive transportation for not less than \$5,000,000.
<p>IMPACT HAZ-1b: Risk of Explosion or Release of Explosive Material – Use On-site. The Project would create a hazard to workers, public or the environment as a result of accidental explosions of blasting material at the site.</p>	<p>MM HAZ-1b: Risk of Explosion or Release of Explosive Material – Use On-site. The management, handling and storage of explosive materials shall be conducted in accordance with the Blast Plan (Gasch & Associates, December 2009) and with adherence to the federal, state and local regulations. <u>To avoid potential damage to</u></p>

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	<p><u>the State Water Project Pipeline, part of the California Aqueduct, the specific requirements of the California Department of Water Resources shall be incorporated into the Blast Plan. These requirements are specified in a letter from the Department, dated June 6, 2013 and submitted to the County of San Luis Obispo as a response to the Draft EIR for the project. The Blaster shall have a current, valid California "Blaster's License" issued by CalOSHA. No on-site storage of explosive materials is allowed.</u></p>
<p>IMPACT HAZ-2: Release of Hazardous Materials or Wastes. The Project could release hazardous materials or hazardous wastes stored on-site, or brought to the site in loads of material to be recycled.</p>	<p>MM HAZ-2: Release of Hazardous Materials or Wastes. Prior to issuance of a Notice to Proceed for the quarry project, the applicant/quarry operator shall provide the Planning and Building Department with documentation that the County Environmental Health Division has reviewed and approved any required registration or plan documents related to the use of hazardous materials and/or generation of hazardous wastes. The management, handling, storage and disposal of hazardous materials and waste shall comply with the applicable federal, state and local hazardous materials and waste regulations. These regulations may include the following requirements:</p> <ul style="list-style-type: none"> • Potentially hazardous materials and waste shall be stored in a manner to minimize a release (e.g., secondary containment). • A Training Program that addresses the federal, state and local regulatory requirements shall be prepared and implemented. • A Contingency and Spill Response Plan shall be prepared and implemented. <u>The response plan will include a requirement that spill kits be kept on-site at all times. The spill kits should be easily accessible and properly maintained to control and contain the amount and type of spill that potentially may occur based on an inventory of hazardous materials that will be stored on-site.</u> • A Business Plan which includes a hazardous materials/waste inventory, quantities and location of hazardous materials/waste and copies of the Training and Contingency Plans shall be prepared and provided to the Certified Unified Program Agency, if hazardous materials are stored above threshold quantities. • Routine inspections of the equipment and storage areas shall be conducted. • Hazardous waste shall be transferred off-site by a licensed transporter to a

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	<p>permitted hazardous waste disposal facility.</p> <ul style="list-style-type: none"> • Servicing and fueling activities shall take place only in designated fueling areas. • Sediment runoff shall be managed under the SWPPP. • Spills of fluid hazardous materials shall be reported immediately to the site supervisor and Environmental Health Division. • Inspection and emergency response records shall be maintained and made available to regulatory agencies upon request. • Any storage of materials shall be consistent with Section 22.10.155 – Stormwater Management.
<p>IMPACT HAZ-5: Fire Hazard Risk. The project will involve blasting and the use of heavy equipment in the vicinity of natural vegetation in an area within a very high fire hazard severity zone.</p>	<p>MM HAZ-5: Fire Hazard Risk. Prior to issuance of Notice to Proceed or issuance of a construction permit for the project, whichever occurs first, the applicant/quarry operator shall apply for and obtain CalFire approval of a Fire Safety Plan for the project. The applicant/quarry operator shall comply with provisions of the Fire Safety Plan and other requirements from CalFire. The applicant/quarry operator shall comply with the current California Fire Code (24 CCR Part 9), California Building Code, Public Resources Code and any other applicable fire laws, as outlined in the “Commercial Fire Plan Review” letter from CAL FIRE/San Luis Obispo County Fire Department, dated July 9, 2010.</p>
<p>IMPACT HAZ-6: Slopes and Other Quarry Hazards. Unstable, steep slopes may be created during the mining process. Workers will be exposed to risks from heavy equipment, blasting, steep slopes, truck operations, and other activities associated with mining operations.</p>	<p>MM HAZ-6: Slopes and Other Quarry Hazards. Throughout the quarry lifetime, the operator shall comply with all applicable worker protection measures addressed by CalOSHA regulations.</p> <p>See mitigation measure GEO-1 (related to quarry slope and bench stability).</p> <p>See mitigation measure NOISE-3 (includes public notification and warnings for blast events).</p>
<p>IMPACT HAZ-7: Potential Exposure to Valley Fever. The project will grade, remove, and stockpile topsoil, which may expose workers to fungal spores that cause Valley Fever and contribute to the off-site transport of soil and spores.</p>	<p>MM HAZ-7a: Potential Exposure to Valley Fever/Dust Control. Mitigation measure AQ-1b (control of PM₁₀ and fugitive dust) will provide adequate control of dust within the project site.</p> <p>MM HAZ-7b: Exposure to Valley Fever/Worker Safety. The Quarry operator shall incorporate applicable recommendations from the Public Health Department regarding recognition and control of Valley Fever in safety plans and worker training material. The content of this training material shall require approval by the Planning</p>

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	and Building Department prior to issuance of the grading permit for construction or the Notice to Proceed (whichever occurs first), and this information shall be maintained with operational and safety plans on-site.
<p>IMPACT LU-2: Compatibility with Land Uses in the Santa Margarita Community. Truck traffic from the project has the potential to be incompatible with the elementary school, residential and other uses in the Santa Margarita village area. Lack of communication between the quarry operator and the community would increase this incompatibility if specific instances or conflicts are not identified and resolved quickly.</p>	<p>MM LU-2: Compatibility with Land Uses in the Santa Margarita Community. The Applicant shall establish a toll free telephone hotline which members of the public may use to report any trucks or drivers that were observed exceeding the speed limits or driving unsafely. The Applicant shall investigate all reports, and shall take appropriate corrective and disciplinary action to prevent any further incidents. The following Mitigation Measures presented in Section 4.11 will also serve to reduce land use incompatibilities from truck traffic:</p> <ul style="list-style-type: none"> • MM TRAFFIC 2a: Traffic Control Management Plan • MM TRAFFIC 2b: Pedestrian Crossing at Encina Avenue • MM TRAFFIC 3b: Internal Traffic and Parking
<p>IMPACT PS-1: Increase in Fire Hazards. The project will contribute to an increase in fire hazards by introducing sources of ignition including: blasting and construction equipment, into a high fire hazard severity zone.</p>	<p>MM PS-1: Increase in Fire Hazards. Mitigation HAZ-5 serves as adequate mitigation for Impact PS-1.</p>
<p>IMPACT REC-2a: Access to Future Salinas River Trail. Future agricultural uses, as allowed by the Rural Lands category, may pose a conflict with the development of the future Salinas River Trail and/or may be incompatible with the recreational uses along this future trail.</p>	<p>MM REC-2a: Access to Future Salinas River Trail. Prior to issuance of a Notice to Proceed, the property owner shall offer a future-trail easement for dedication to the County, along the Salinas River Trail corridor, subject to conditions and County policies to coordinate trail development and to protect public safety and property owner rights. The offer of dedication shall be a minimum of 40 25 feet in width and be located adjacent to the Salinas River (outside of the creek corridor). The final location of the offer of dedication shall be determined in consultation with the Parks Department.</p>
<p>IMPACT REC-2b: Conflict with Bicyclists along SR 58. Heavy vehicle traffic associated with the proposed project may conflict with bicyclists traveling along SR 58.</p>	<p>MM REC-2b: Conflict with Bicyclists along SR 58. Mitigation Measure TRAFFIC-4b serves as adequate mitigation for Impact REC-2b.</p>
<p>IMPACT TRAFFIC-1a: Increase Traffic at El Camino Real/SR 58 and Estrada Avenue. The project will contribute additional traffic to this intersection adjacent to the UPRR rail crossing, where a potential need for signalization already exists.</p>	<p>MM TRAFFIC-1a: Increase Traffic at El Camino Real/SR 58 and Estrada Avenue. Prior to the issuance of a Notice to Proceed, the applicant/quarry operator shall provide payment or a suitable financial guarantee to fund a portion of the cost of signalization and related intersection improvements at Estrada Avenue SR 58 and El</p>

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Potentially unsafe traffic conditions may be created at this location.	Camino Real. The amount is to be determined by the County Department of Public Works based on the proportion of total peak hour traffic through the intersection that is assignable to this project, using methods consistent with Caltrans guidelines. The timing for this requirement may be extended by the County into a later phase of the quarry project in the event Caltrans and the Department of Public Works determine that postponement of signalization of this intersection is appropriate. <u>Any signal or other improvements at this intersection must meet Caltrans signal warrants and design standards.</u>
IMPACT TRAFFIC-2b: Pedestrian Crossing at Encina Avenue. The project will increase traffic, and contribute towards pedestrian safety conflicts, at this crossing of El Camino Real in downtown Santa Margarita.	MM TRAFFIC-2b: Pedestrian Crossing at Encina Avenue. Prior to issuance of a Notice to Proceed with quarry operations, the applicant/quarry operator shall construct a pedestrian refuge island on SR 58 at the intersection of Encina Avenue, or related pedestrian safety improvement consistent with the Santa Margarita Design Plan, as approved by the County Department of Public Works and Caltrans. <u>This improvement will require a Caltrans encroachment permit and compliance with applicable Caltrans design standards.</u>
IMPACT TRAFFIC-3a: Access. The proposed access drive will require construction within the SR 58 right-of-way causing temporary disruption of highway traffic, and long term adverse effects on traffic using the state highway.	MM TRAFFIC-3a: Access. Prior to the issuance of any construction permit by the County for the project access road, the applicant/quarry operator shall obtain an Encroachment Permit from Caltrans, and shall incorporate any conditions from Caltrans related to traffic controls or construction of the access road into its design, <u>including a left turn lane from SR58 at the project entrance. These conditions may include sight distance and other design features consistent with the Highway Design Manual, and compliance with subsequent Caltrans environmental review, if necessary, and other Encroachment Permit procedures.</u>
IMPACT TRAFFIC-3b: Internal Traffic and Parking. Early morning parking by trucks waiting for the quarry to open could disturb and adversely affect residential areas.	MM TRAFFIC-3b: Internal Traffic and Parking. The applicant/quarry operator shall designate and publicize to customers and haulers, off-site limits within which trucks should not operate or park while awaiting for the quarry gates to open in the morning. Prior to issuance of the Notice to Proceed for any off-site sale and transport of aggregate material, the applicant/quarry operator shall provide the Department of Planning and Building with documentation identifying these off-site limits and how they will be communicated to truck operators and to residents in the community. The documentation shall also identify by name and telephone number, where complaints may be made regarding unacceptable truck parking.

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	NOTE: If Applicant Proposed Measure APM LU-1 is adopted, then MM-TRAFFIC-3b would be incorporated into the Traffic Control Management Plan.
<p><u>IMPACT TRAFFIC-4b: Impacts to SR 58 (Deterioration of Roadway Structural Conditions). The project would cause incremental damage and wear to roadway pavement surfaces along SR 58.</u></p>	<p><u>MM TRAFFIC-4b: Impacts to SR 58 (Deterioration of Roadway Structural Conditions).</u></p> <p><u>The project applicant shall implement one of the following Options:</u></p> <p><u>Option 1: Prior to issuance of the Notice to Proceed, the Applicant shall prepare a pavement monitoring program for SR 58 between MM 0.00 and MM 5.44 for review and approval by the County in consultation with Caltrans. The program shall provide before and after video evidence of pavement conditions, require the posting of a pavement repair bond or other mechanism to fund the repair of roadway deterioration resulting from the project, and a mechanism that ensures the funds collected will only be used for improvements / repairs to SR 58 between MM 0.00 and MM 5.44. The Applicant shall coordinate with Caltrans regarding the details of the monitoring program and any requirements for road repair should they become necessary. The program shall include criteria for when maintenance is required and the type of repairs required for various pavement deterioration conditions that may result from heavy truck traffic. Any improvements / repairs resulting from the pavement monitoring program shall be made in accordance with the most current "Complete Streets Implementation Action Plan" prepared by Caltrans to implement Deputy Directive 64-R1.</u></p> <p><u>Option 2: Prior to issuance of the Notice to Proceed, the Applicant shall enter into an agreement in a form acceptable to the County of San Luis Obispo or Caltrans to pay for the project's fair share of impacts to SR 58 roadways (between MM 0.00 and MM 5.44). The agreement shall include a mechanism that ensures the funds collected will only be used for improvements/repairs to SR 58 between MM0.00 and MM5.44. The cost per load / cost per ton shall be established using project generated information and / or assumptions consistent with Caltrans standards including the cost associated with any improvements required by the most current "Complete Streets Implementation Action Plan" prepared by Caltrans to implement Deputy Directive 64-R1. The Applicant shall be responsible for costs associated with implementation of this measure as required by either the County of San Luis Obispo or Caltrans. The</u></p>

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	<p><u>cost per load / cost per ton shall be subject to annual adjustment based on the Caltrans Construction Cost Index however, in no case shall a negative cost index be allowed to reduce the previous year's fee. The beginning index date shall be the date that the project receives approval by the hearing body.</u></p>
<p>IMPACT WW-1: Demand for Wastewater Disposal Service. The project will contribute to an incremental demand for Wastewater service, which can be provided by an on-site septic system.</p>	<p>MM WW-1: Demand for Wastewater Disposal Service. Prior to the issuance of a permit for the project's septic and leach field system, the applicant/quarry operator shall submit percolation test results and leachfield design details for review and approval by the Department of Planning and Building.</p>
<p>IMPACT WQ-1: Alteration of Runoff Water. The project would disturb an area of approximately 41 acres, draining towards Moreno Creek (entrance road and Phases 1A and 1B), and in the northern unnamed creek drainage towards the Salinas River. The grading and quarry activities may introduce pollutants including sediment, and materials associated with quarrying and rock processing, into these surface waters through stormwater runoff and/or dry season releases.</p>	<p>MM WQ-1a: Alteration of Runoff Water/Construction Activities. The applicant/quarry operator shall submit appropriate Permit Registration Documents (PRDs) to the SWRCB to provide coverage of the construction of the project (utilities, entrance road, and completion of construction through the end of Phase 1B or other point as appropriate under the Statewide General Permit for Construction (SWRCB Order No. 2009-0009-DWQ, NPDES No. CAS000002, or more current permit). Evidence of such coverage shall be provided to the County prior to the start of construction. All measures to control stormwater runoff and minimize discharges identified in the PRDs and related plans shall be timely implemented during construction.</p> <p>MM WQ-1b: Alteration of Runoff Water/Mining Activities. The applicant/quarry operator shall submit <u>Permit Registration Documents</u> a Notice of Intent (NOI) and a related Stormwater Pollution Prevention Plan (SWPPP) to the SWRCB to provide coverage of the surface mine as an industrial use under the <u>General Permit for Storm Water Discharges Associated with Industrial Activities</u> Statewide General Permit for Industrial Uses (SWRCB Order No. 97-03-DWQ, and NPDES No. CAS000001. or more current permit). Evidence of such coverage shall be provided to the County prior to the start of Phase 1A. Measures to control stormwater runoff and minimize discharges identified in the documentation related to this permit shall be implemented, and be subject to monitoring and verification as provided in the permit. <u>In the event the project comes under the County stormwater provisions and general Nationwide Pollutant Discharge Elimination System Permit, Alternatively,</u> this condition may be met through compliance with the County Stormwater Management provisions of Section 20.10.155 of the Land Use Ordinance.</p>

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Description of Impact	Mitigation Measures
	MM WQ-1c: Alteration of Runoff Water/Equipment Maintenance. The applicant/quarry operator shall provide parking areas for equipment and servicing of equipment, and storage areas for any hazardous materials or other pollutants kept on-site, that have controlled drainage such that in the event of an accidental spill pollutant runoff to off-site surface water will not occur.
IMPACT WQ-2: Alteration of Groundwater. The project will discharge septic effluent via an on-site leach field, which has potential to contaminate groundwater.	MM WQ-2: Alteration of Groundwater. Mitigation Measure WW-1 (Section 4.12) serves as adequate mitigation for Impact WQ-2.

**TABLE ES-2
SUMMARY OF IMPACTS WHICH CANNOT BE MITIGATED TO A LEVEL BELOW SIGNIFICANCE**

The following impacts would be significant and unavoidable. For each of these impacts, feasible mitigation measures will be applied; however, the impacts will remain significant. Prior to project approval, the Planning Commission or the Board of Supervisors must adopt a Statement of Overriding Considerations, in accordance with Section 21081(a) (3) of CEQA.

Description of Impact	Mitigation Measures to be Applied, although the Impact Remains Significant
<p>IMPACT AES-1: Scenic Vistas. The project will create graded slopes into natural hillsides, which will be visible to the public from portions of the SR 58 corridor, which is identified for study as a scenic corridor by the Conservation and Open Space Element. These slopes may adversely affect the aesthetic character of the site and the surrounding area. The location of Tank "A" will be visible from public views and has the potential to silhouette against the skyline as viewed from SR 58.</p>	<p>MM AES-1a: Scenic Vistas/Reclamation and Revegetation. Revegetation of all final slopes and flat portions of the completed mine shall be accomplished in accordance with the approved Surface Mine Reclamation Plan. This includes phased reclamation in which exposed slopes in Phases 1B, 2A, 2B, and 3A are revegetated as early as practical, concurrent with the start of quarrying in the next subsequent phase. Upon completion of all quarry activities, all equipment and the access road are to be removed, and lower slopes within the quarry shall be filled to a slope of no more than 2:1 and revegetated consistent with the Final Site Configuration Plan shown in Appendix B and consistent with the performance standards for revegetation in the state surface mining regulations (14 CCR 3705). In accordance with Sections 22.01.050 (D) (4) and 22.01.070 of the County Land Use Ordinance, all revegetated areas shall be permanently maintained in perpetuity. The applicant/quarry operator shall provide a financial guarantee to ensure completion of the reclamation plan, including monitoring and maintenance to demonstrate that vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of the final assurance.</p> <p>MM AES-1b: Scenic Vistas/Off-site Landscaping Agreement. Prior to the issuance of the Grading Permit for project construction activities, the applicant/quarry operator shall obtain agreement from the off-site property owner (APN 070-154-019 / 6825 Calf Canyon Highway) for installation and maintenance of additional landscaping as described below in mitigation measure AES-1c. The off-site landscaping shall be shown in a preliminary landscaping plan included within the grading plans for construction of the project access road and other initial improvements <u>as described in MM AES-1c with the intent of screening views of the quarry from eastbound travelers on SR 58.</u></p> <p>MM AES-1c: Scenic Vistas/Off-site Landscaping. Prior to the start of excavations in Phase 1A, off-site landscaping shall be installed at a location approved by the Planning and Building Department (approximately 1,500 feet southwest of the project entrance and 100 feet southeast of the SR 58 roadway edge). The landscaping shall consist of 2 to 4 conifers or other tall growing trees consistent with the existing trees at this location, and shall be planted at a location that will help to block views into the quarry site from eastbound traffic on SR 58 and maintained for the life of the project.</p>

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Description of Impact	Mitigation Measures to be Applied, although the Impact Remains Significant
	<p>MM AES-1d: Scenic Vistas/Screening of Water Tank. Prior to the issuance of any construction permit for project construction activities, the applicant/quarry operator shall show landscape screening in a preliminary landscape plan. Landscaping shall be installed and maintained for the life of the project to visually screen Tank "A" from public views along SR 58. <u>The applicant shall provide evidence that the proposed tank(s) are as low profile as is possible, given the site conditions and tank(s) shall be a neutral or dark, non-contrasting color.</u></p>
<p>IMPACT AES-4: Cumulative Effects on Aesthetics and Visual Resources. It is reasonable to expect that future quarries will be approved and constructed in the area surrounding the project. An unspecified number of these future quarries will have graded areas and ultimately revegetated slopes that will have adverse visual impacts similar to the proposed project, particularly when viewed from SR 58. However, the specific number and actual configuration of these future quarries is unknown at this time.</p>	<p>MM AES-4: Cumulative Effects on Aesthetics and Visual Resources. Mitigation measures similar to AES-1a, AES-1b, AES-1c, and AES-1d are likely to be applied to any future quarries. These measures may serve to minimize impacts on views from SR 58, but they are not likely to eliminate impacts entirely.</p>
<p>IMPACT AQ 1a: Emissions of ROG+NO_x. Operations at the quarry at the planned production rate of 500,000 tons per year would generate combined emissions of Reactive Organic Gases (ROG) and nitrogen oxides (NO_x) in excess of the daily and annual SLOAPCD thresholds defining a significant impact for these ozone precursors.</p>	<p>MM AQ 1a: Emissions of ROG+NO_x. Prior to issuance of a Notice to Proceed for the first phase of the quarry operation, the applicant or quarry operator shall provide evidence to the Department of Planning and Building that an acceptable set of measures to reduce ROG+NO_x emissions has been approved by the SLOAPCD. The Quarry operator shall comply with the following on site requirements for this project to minimize ROG+NO_x emissions, or achieve equivalent reductions through measures approved by the SLOAPCD:</p> <ol style="list-style-type: none"> 1. Blasting shall not be conducted on days when portable aggregate processing equipment is in operation. 2. On and off road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit. 3. If not required by other regulations (CARB on road or off road diesel requirements), transport operations conducted by the quarry operator shall be restricted to trucks with 2007 model year engines or newer trucks. 4. Use Best Available Control Technology (BACT) measures for construction activities as follows: <ul style="list-style-type: none"> ● Further reducing emissions by expanding use of Tier 3 and Tier 4 off road and 2010 on road compliant engines; ● Repowering equipment with the cleanest engines available; and ● Installing California Verified Diesel Emission Control Strategies. These strategies are listed at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm

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	<p>5. If the combination of these requirements does not meet the standard of 25 pounds per day of ROG+NO_x, then the applicant or quarry operator shall comply with a combination of certain off-site requirements presented in Section 3.8.3 of the "CEQA Air Quality Handbook (April 2012)" prepared by the SLOAPCD, and/or additional measures in a Construction Activities Management Plan (CAMP) described in Section 4.5 of the same Handbook, to achieve this standard to the satisfaction of the SLOAPCD. This requirement may include funding and implementation of off-site mitigation measures consistent with the existing SLOAPCD program described in Section 3.8.3 of the same Handbook.</p>
<p>IMPACT AQ-1b: Emissions of PM₁₀-Fugitive Dust. Operations at the quarry at a production rate of 500,000 tons per year would generate emissions of PM₁₀ fugitive dust in excess of the daily SLOAPCD thresholds defining a significant impact for this criteria pollutant. The fugitive dust emissions would not exceed the annual threshold.</p>	<p>MM AQ-1b: Emissions of PM₁₀-Fugitive Dust. The Quarry operator comply with the following on-site requirements for this project to minimize PM₁₀ fugitive dust emissions:</p> <ol style="list-style-type: none"> 1. Reduce the amount of disturbed area where possible, by retaining the natural vegetation and soil within each quarry phase until that phase is ready to start. 2. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. 3. All soil or product stockpile areas should be sprayed daily as needed, or be covered or treated to minimize windblown dust. 4. The project access drive should be completed and paved prior to the start of quarry operations and the operation of heavy trucks on the property for aggregate sales purposes. 5. Locations for stockpiles and material storage areas, along with specifications for dust control measures, shall be shown on all applicable construction and mining plans. 6. The quarry operator shall designate a person to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and phone number of such person shall be provided to the SLOAPCD prior to issuance of Notice to Proceed or other permit to initiate work on the project. 7. Reclamation and revegetation of all disturbed areas shall occur as soon as practicable in a phased manner consistent with the project plans. Watering or other treatments shall be used on replaced soil material to control windblown dust until vegetation is established. 8. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD. 9. Vehicle speed for all quarry vehicles and trucks on unpaved portions of the operations area shall not exceed

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	<p>15 mph.</p> <p>10. All trucks hauling dirt, sand, soil, or other loose materials are to be covered, fitted with appropriate seals and splash guards, and must be operated in conformance with California Vehicle Code 23114 related to hauling materials.</p> <p>11. Sweep streets at the end of each day if visible soil material is carried onto the project access road. Water sweepers with reclaimed water should be used where feasible.</p> <p>12. Prior to commencement of any construction activities (e.g., site preparation, grading or construction activities) the applicant will notify the County Department of Planning and Building and the SLOAPCD, by letter, of the status of the air quality measures outlined above. The letter will state the following:</p> <ul style="list-style-type: none"> a) The controls that will be implemented; b) The reasons why any unimplemented measures are considered infeasible and the measures incorporated to substitute for these measures; and c) When scheduled construction activities will be initiated to allow for SLOAPCD inspection of the mitigation measures. [Murray Wilson: Move to Table ES-1].
<p>IMPACT NOISE-1: Truck Traffic Noise. The project will generate additional truck traffic, which may potentially increase noise levels along SR 58 by up to 1.9 dBA with distinct low frequency noise associated with heavy trucks. At some locations the resulting noise levels will reach the County criteria of 60 dBA, which would be a potential significant impact.</p>	<p>MM NOISE-1: Truck Traffic Noise. The applicant/quarry operator shall advise all truck drivers exiting the facility regarding the noise sensitive residential uses along the truck route through Santa Margarita, and shall prohibit the use of compression brakes except under emergency conditions. Documentation in the form of notification copies shall be provided to the Planning and Building Department prior to the notice to proceed for Phase 1A of the quarry.</p> <p>NOTE: If Applicant Proposed Measure APM LU-1 is adopted, then MM-NOISE-1 would be incorporated into the Traffic Control Management Plan.</p>
<p>IMPACT NOISE-2: Quarry Operations Noise. During early phases of the proposed quarry, including the initial construction and quarrying through the completion of Phases 1A and 1B, the hourly Leq values caused by the quarry operations at some nearby residences may exceed the County daytime Leq standard of 50 dBA (or ambient plus 1 dBA).</p>	<p>MM NOISE-2a: Quarry Operations Noise/Maintenance. The applicant shall maintain all manufacturers' mufflers or other noise reducing equipment on all quarry vehicles and equipment.</p> <p>MM NOISE-2b: Quarry Operations Noise/Noise Management Plan. Prior to issuance of any permits for the start of construction, the applicant shall prepare and submit a noise management plan to specify measures for the control and monitoring of noise levels, to be approved by the Planning and Building Department and implemented by the operator throughout at least the completion of Phase 1A and 1B. Elements of the Noise Management Plan shall include:</p> <ul style="list-style-type: none"> • Descriptions of measures that may be used to reduce noise levels, which may include: <ul style="list-style-type: none"> ▪ The use of low noise emitting equipment ▪ Scheduling of operations to minimize the number of heavy equipment vehicles in use at one time

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	<ul style="list-style-type: none"> ▪ Design of stockpile and loading areas to minimize the need for trucks to back up ▪ Use of adjustable back up alarms or similar measures to minimize noise from this source ▪ The design and placement of stockpiles to act as noise barriers ▪ The use of temporary noise barriers <ul style="list-style-type: none"> • Descriptions of monitoring points and times appropriate to obtain data to demonstrate compliance with the County Code (Section 22.10.120) <p>MM NOISE-2c: Quarry Operations Noise/Noise Complaint Procedures. The applicant shall provide the County Planning and Building Department with, and post at a visible location on the property, the name and contact information for a representative who will be available to respond to noise complaints. Procedures for responding to and resolving noise complaints shall also be incorporated into the operating plans for the quarry.</p>
<p>IMPACT NOISE-3a: Blasting Noise. Quarry operations involving blasting may potentially cause a significant impact. During early phases of the proposed quarry blasting, Lmax values at nearby residences are predicted to range from 62 dBA to 80 dBA, depending on the prediction method used.</p>	<p>MM NOISE-3a: Blasting Noise/Blasting and Public Notification Plan. Prior to the Notice to Proceed with quarrying in Phase 1A, the applicant shall provide, and the Planning and Building Department shall review and approve if acceptable, a Public Information and Notification Plan for blasting activities. The Plan shall describe the blasting and related activities, and specify a notification procedure so that nearby residences may be informed ahead of time regarding pending blast events. The warning and all clear signal system shall be described, and contact information provided for the purpose of obtaining further information or for lodging complaints. All blasting activities shall be conducted by a licensed blasting contractor in a manner consistent with the blasting plan prepared for the project, and shall be limited to daytime hours on normal working days. All blast events shall be monitored for air overpressure (sound levels) at points that will allow computation of resulting noise levels at nearby residences. Blast reports, including the results of ground vibration and air overpressure monitoring shall be retained at the quarry office and shall be submitted to the County Department of Planning and Building on request, and be available for inspection. Control measures and public information can reduce the effects of blasting noise but they cannot be fully mitigated.</p>
<p>IMPACT NOISE-5: Cumulative Traffic Noise. Truck traffic from the project, when added to existing truck traffic from the Hanson Santa Margarita Quarry, may cause a significant impact.</p>	<p>MM NOISE-5: Cumulative Traffic Noise. Mitigation NOISE 1a and 1b serve as mitigation for Impact NOISE-5.</p>
<p>IMPACT TRAFFIC 2a: Elementary School Crossing. Project generated heavy truck traffic may impair visibility of roadway traffic from the Santa Margarita Elementary school crossing on Estrada Avenue at H Street. Since the</p>	<p>MM TRAFFIC 2a: Elementary School Crossing. Since this effect is less than significant, no mitigation is required.</p> <p>NOTE: Applicant Proposed Measure APM LU 1A addresses this item as a land use compatibility issue.</p>

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crossing design and improvements on this state highway are consistent with applicable standards, this effect is a less than significant impact.	
<p>IMPACT TRAFFIC-4a: Cumulative Contribution to 2030 Traffic Volumes. The project will contribute towards future (2030) traffic volumes including trips associated with the development of the Santa Margarita Ranch Agricultural Residential Cluster Subdivision, that will degrade the LOS at the intersection of Estrada Avenue SR 58 and El Camino Real, and at the intersection of Estrada Avenue and H Street (location of the Santa Margarita Elementary School pedestrian crossing).</p>	<p>MM TRAFFIC-4a: Cumulative Contribution to 2030 Traffic Volumes. The applicant/quarry operator shall enter into an agreement with the County to pay their fair share of improvements necessary to identified intersections in the community of Santa Margarita. The applicable fair share is currently estimated at 8.1 percent based on the proportional contribution by the project to traffic at the intersection of Estrada Avenue and El Camino Real. The fair share contribution shall be evaluated and the agreement updated as necessary by the County in consultation with Cal Trans, prior to the issuance of each Notice to Proceed for each phase of the quarry.</p> <p>Although the proposed mitigation would reduce impacts to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, in cannot be assured that all improvements would be feasibly constructed prior to the time when they are needed. As a result, cumulative traffic impacts would remain significant and unavoidable.</p>

**TABLE ES-3
SUMMARY OF ENVIRONMENTAL EFFECTS WHICH HAVE BEEN FOUND TO BE LESS THAN SIGNIFICANT**

According to Section 15126.4 of the CEQA Guidelines, Mitigation Measures are not required for effects which are found not to be significant. The Initial Study/Notice of Preparation identified certain issues which were determined to be less than significant at the outset. Also, the EIR analyzed certain other issues and concluded that they were less than significant. Both types of issues are summarized in Table ES-3.

Description of Impact	Mitigation Measures
Effects Identified in the Notice of Preparation/Initial Study	
Cultural Resources.	A Phase I (surface) survey was conducted (Heritage Discoveries, Inc., April 16, 2009), which indicated that there was no evidence of cultural materials on the property within the project activity areas. No historic structures are present and no paleontological resources are known to exist in the area. Due to the steepness of the terrain affected by the proposed quarry, the likelihood of major cultural resources being present is very low.
Population and Housing.	Existing structures on the larger property that includes the proposed quarry site include a barn, storage shed, shop/garage, a trailer and two single residential structures, all located towards the southern boundary of the site off of SR 58. These structures are limited in number, and support the existing residences and ranch uses located there. The project will not induce growth in the area (as described further in Section 7.1 of this EIR).
Effects Identified in the EIR	
Description of Impact	Mitigation Measures
IMPACT AES-2: Scenic Vistas/Salinas River Trail. Although the project will create graded slopes into natural hillsides in the general vicinity of the proposed Salinas River trail corridor, those views will be blocked by existing vegetation and intervening topography.	MM AES-2: Scenic Vistas/Salinas River Trail. Since this effect is less than significant, no mitigation is required.
IMPACT AG-1: Loss of Agricultural Land. The project involves the direct conversion of 1.2 acres of Metz loamy sand, 0–5 percent slope, which is currently used for grazing, and loss of access to an additional 0.9 acre. This is a relatively small area of Important Agricultural Soil and the current agricultural	MM AG-1: Loss of Agricultural Land. Since this effect is less than significant, no mitigation is required.

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Description of Impact	Mitigation Measures
use is of low intensity.	
IMPACT AG-4: Cumulative Effects Related to Agricultural Resources. The proposed project would result in a loss of approximately 2.1 acres of grazing land which is relatively small in size and is generally of low productivity.	MM IMPACT AG-4: Cumulative Effects Related to Agricultural Resources. Since this effect is less than significant, no mitigation is required.
IMPACT AQ-1c: Emissions of Other Criteria Pollutants (CO and SO₂). The project will result in emissions of carbon monoxide (CO) and small amounts of sulfur dioxide (SO ₂) which will not accumulate or cause exceedances of any AAQS.	MM AQ-1c: Emissions of Other Criteria Pollutants (CO and SO₂). Since this effect is less than significant, no mitigation is required.
IMPACT AQ-3: Creation of Objectionable Odors. The project proposes to mine granitic rock and produce aggregate products for sale. The project will also accept and process "Type A" inert debris, consisting of Portland Cement Concrete and Asphaltic Concrete, to produce recycled material for use in roadway construction.	MM AQ-3: Creation of Objectionable Odors. Since this effect is less than significant, no mitigation is required.
IMPACT AQ-4: Consistency with Clean Air Plan. The project involves activities and generation of truck traffic that would be potentially inconsistent with the Clean Air Plan.	MM AQ-4: Consistency with Clean Air Plan. Since this effect is less than significant, no mitigation is required.
IMPACT AQ-5: Cumulative Effects Related to Air Quality. The project, in combination with the Hanson Santa Margarita Quarry and other significant projects, involve activities and generation of truck traffic that would be potentially inconsistent with the Clean Air Plan.	MM AQ-5: Cumulative Effects Related to Air Quality. Since this effect is less than significant, no mitigation is required.
IMPACT BIO-11: Effect on Wildlife Movement. The Quarry project may potentially impact landscape level movement of large mammals, migratory birds or other wildlife.	MM BIO-11: Effect on Wildlife Movement. Since this effect is less than significant, no mitigation is required.
IMPACT BIO-12: Cumulative Effects Related to Biological Resources. The loss of 40.29 acres of habitat from this project site may potentially constitute a cumulatively considerable biological impact in this region, in the context of surrounding habitat in the region surrounding the project site.	MM BIO-12: Cumulative Effects Related to Biological Resources. Since this effect is less than significant, no mitigation is required.
IMPACT GEO-2: Exposure to Geologically Hazardous Conditions. The proposed quarry site may potentially be affected by an Alquist-Priolo fault zone, expansive soils, or a 100-year floodplain.	MM GEO-2: Exposure to Geologically Hazardous Conditions. Since this effect is less than significant, no mitigation is required.

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Description of Impact	Mitigation Measures
<p>IMPACT GEO-5: Policy Consistency and Effects on Future Mining. The project design may potentially preclude future mining on other portions of the Oster property, and/or potentially not affect the potential for mining granitic rock on nearby properties.</p>	<p>MM GEO-5: Policy Consistency and Effects on Future Mining. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT GEO-6: Cumulative Effects Related to Geology. Some effects related to geology could be cumulative in nature. These effects include the loss of topsoil through erosion and the discharge of sediment into surface water courses. These effects may be associated with any proposed quarry, or with any other type of development or even with a change in agricultural activities. For these issues, permit requirements and existing statewide programs provide measures that serve to avoid or minimize the potential cumulative effects on a project-by-project basis.</p>	<p>MM GEO-6: Cumulative Effects Related to Geology. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT GHG-1: Greenhouse Gas Generation. The greenhouse gas emissions generated from the Quarry project may potentially exceed the Screening Threshold (10,000 MTCO₂e/year) established for evaluating these emissions.</p>	<p>MM GHG-1: Greenhouse Gas Generation. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT GHG-2: Potential Greenhouse Gas Generation Plan Conflicts. The Quarry project may potentially conflict with the applicable Greenhouse Gas Emission policies of the Open Space and Conservation Element of the County General Plan.</p>	<p>MM GHG-2: Potential Greenhouse Gas Generation Plan Conflicts. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT GHG-3: Cumulative Effects Related to Greenhouse Gas Emissions. The greenhouse gas emissions generated from the Quarry project may be significant, when combined with the emissions from the Hanson Quarry or other sources.</p>	<p>MM GHG-3: Cumulative Effects Related to Greenhouse Gas Emissions. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT HAZ-3: Effect on Regional or Local Evacuation Plans. The Project may potentially conflict with emergency response or regional or local evacuation plans. The project will have its own dedicated access drive from SR 58, which may potentially affect access to either of the two residences located elsewhere on the property, or any other residences in the vicinity.</p>	<p>MM HAZ-3: Effect on Regional or Local Evacuation Plans. Since this effect is less than significant, no mitigation is required.</p>

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<p>IMPACT HAZ-4: Airport Flight Patterns. The proposed quarry may potentially involve activities that would interfere with aircraft operations in the vicinity. For these reasons, the proposed project could potentially expose people to a safety risk associated with airport flight patterns.</p>	<p>MM HAZ-4: Airport Flight Patterns. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT HAZ-8: Cumulative Effects Related to Hazards and Hazardous Materials. All present and future granite quarries which transports, manages, and handles explosive and hazardous materials may cause potential impacts related to hazards. All quarries and major construction projects have potential to contribute to Valley Fever, through removal of vegetation and topsoil during grading.</p>	<p>MM HAZ-8: Cumulative Effects Related to Hazards and Hazardous Materials. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT NOISE-3b: Blasting Ground Vibration. The project will involve blasting and heavy equipment operation that may potentially induce vibration at nearby residences. Estimated peak particle velocities of 0.2–0.3 inch per second are considered very low and are not expected to cause damage to normal structures.</p>	<p>MM NOISE-3b: Blasting Ground Vibration. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT NOISE-4: Cumulative Effects Related to Operational Noise. Operational noise from the project, when added to existing operational noise from the Hanson Santa Margarita Quarry, may cause a significant impact.</p>	<p>MM NOISE-4: Cumulative Effects Related to Operational Noise. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT PS-2: Demand for Public Services. The project will contribute a small increment to demand for other public services, which can be provided by the appropriate public service providers (police, schools, roads, and solid waste).</p>	<p>MM PS-2: Demand for Public Services. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT PS-3: Cumulative Effects Related to Public Services and Utilities. This project, along with others in the area, will have a cumulative effect on road facilities as well as police and fire protection, and will not affect schools.</p>	<p>MM PS-3: Cumulative Effects Related to Public Services and Utilities. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT REC-1: Increase Use or Demand for Recreational Facilities. The project may potentially increase population and/or provide new housing, and it may potentially increase the demand for recreational facilities.</p>	<p>MM REC-1: Increase Use or Demand for Recreational Facilities. Since this effect is less than significant, no mitigation is required.</p>

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Description of Impact	Mitigation Measures
<p>IMPACT REC-3: Cumulative Effects Related to Recreation. All present and future granite quarries may potentially increase population and/or provide new housing, and they may potentially increase the demand for recreational facilities.</p>	<p>MM REC-3: Cumulative Effects Related to Recreation. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT TRAFFIC-1b: Traffic Volume Increases – Level of Service. The project will cause small increases in the traffic delay at intersections in the project vicinity, and on the traffic density on US Highway 101 and the SR 58 freeway ramps. In all cases, these changes will not alter the existing Level of Service (LOS) and in all cases the existing LOS is within applicable standards.</p>	<p>MM TRAFFIC-1b: Traffic Volume Increases – Level of Service. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT TRAFFIC-2a: Elementary School Crossing. <u>Project generated heavy truck traffic may impair visibility of roadway traffic from the Santa Margarita Elementary school crossing on Estrada Avenue at H Street. Since the crossing design and improvements on this state highway are consistent with applicable standards, this effect is a less than significant impact.</u></p>	<p>MM TRAFFIC-2a: Elementary School Crossing. <u>Since this effect is less than significant, no mitigation is required.</u> <u>NOTE: Applicant Proposed Measure APM LU-1A addresses this item as a land use compatibility issue.</u></p>
<p>IMPACT WW-2: Cumulative Effects Related to Wastewater. The project, in conjunction with future development in the area, may potentially contribute to a small increment of demand for wastewater treatment services.</p>	<p>MM WW-2: Cumulative Effects Related to Wastewater. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT WQ-3: Increased Use of Surface Water. The project will increase total water use on the property from approximately 2 afy to 7 afy. This amount may potentially require an increase in the use of surface water.</p>	<p>MM WQ-3: Increased Use of Surface Water. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT WQ-4: Effect on Community Water Service Provider. This project could potentially affect a nearby water service provider such as CSA 23 in Santa Margarita.</p>	<p>MM WQ-4: Effect on Community Water Service Provider. Since this effect is less than significant, no mitigation is required.</p>
<p>IMPACT WQ-5: Cumulative Effects Related to Water Quality and Supply. The project, in conjunction with the nearby Hanson Santa Margarita Quarry and other uses, will continue the use of surface and shallow subsurface water from the Salinas River. This water use could potentially and adversely affect upstream users or contribute to any short-term declines in water levels along Parkhill Road, due to its location.</p>	<p>MM WQ-5: Cumulative Effects Related to Water Quality and Supply. Since this effect is less than significant, no mitigation is required.</p>

**TABLE ES-4A
COMPATIBILITY WITH SURROUNDING AREA SITE**

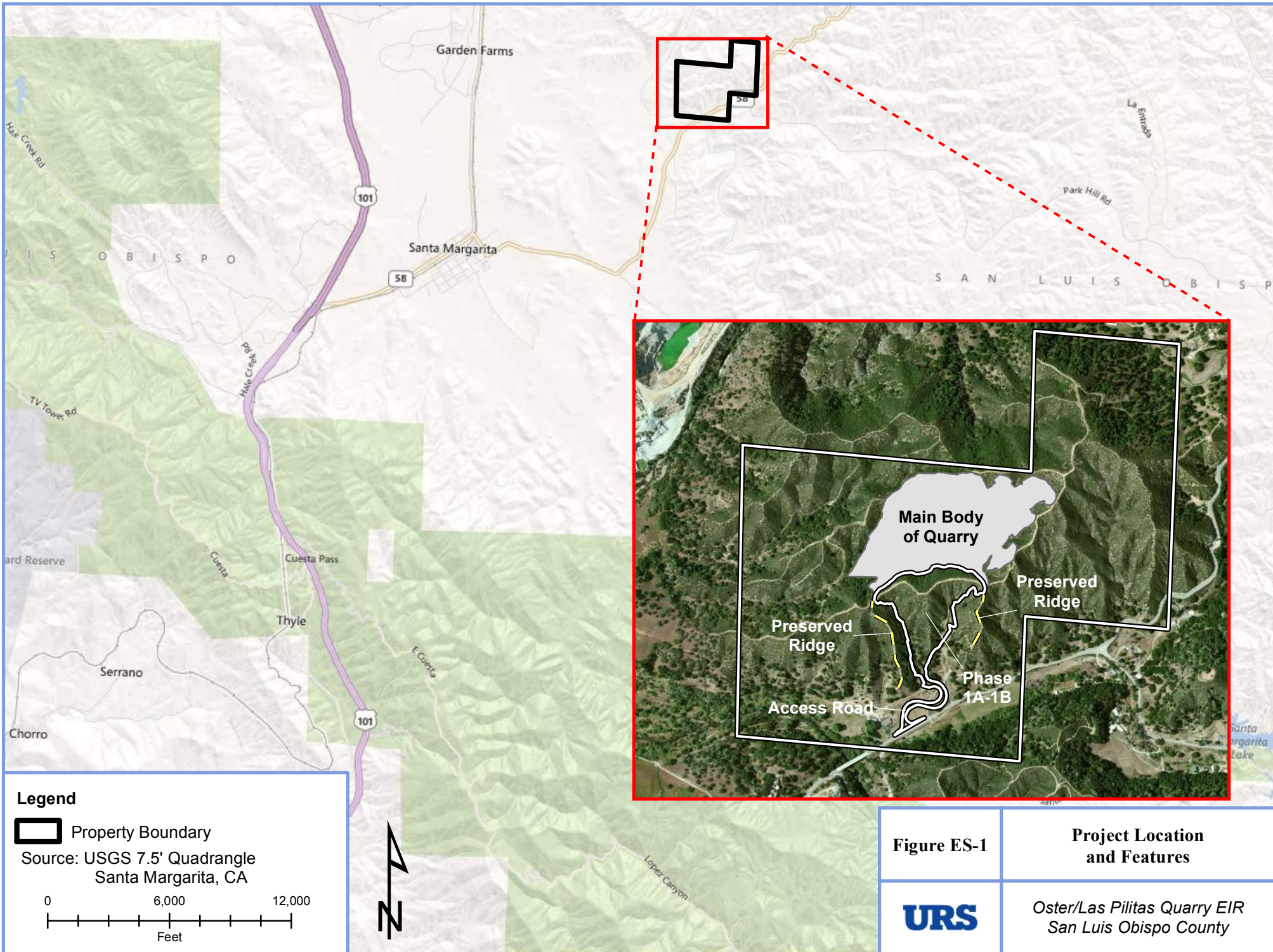
Description of Land Uses, Categories	Discussion
North: vacant land, grazing, Rural Lands/EX1 Extractive Resource Area Combining Designation	Large lots and adherence to the EX1 Extractive Resource Area Combining Designation would ensure compatibility if these properties are developed in the future.
South: several rural homes on Parkhill Road and SR 58 1. Rural Lands/EX1 Extractive Resource Area Combining Designation 2. Residential Rural	Combination of: distance; retention of ridgelines; and operational restrictions may reduce incompatibility of the quarry to the existing and future residential development south of the project, but impacts (Noise) would still result.
East: vacant land, grazing, rural home on SR 58, 1. Rural Lands/EX1 Extractive Resource Area Combining Designation 2. Residential Rural	Combination of: distance; retention of ridgelines; and operational restrictions may reduce incompatibility of the quarry to the existing and future residential development south of the project, but impacts (Noise) would still result. Large lots and adherence to the EX1 Extractive Resource Area Combining Designation would ensure compatibility if vacant properties develop in the future.
West: vacant land, grazing, Hanson Quarry, Rural Lands/EX1 Extractive Resource Area Combining Designation	Large lots and adherence to the EX1 Extractive Resource Area Combining Designation would ensure compatibility if these properties develop in the future.


**TABLE ES-4B
COMPATIBILITY WITH SANTA MARGARITA COMMUNITY**

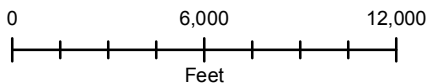
Description of Issue	Applicant Proposed Measures
<p>Compatibility with Land Uses in the Santa Margarita community. Truck traffic from the project has the potential to be incompatible with surrounding land uses that generate pedestrian traffic, such as the Santa Margarita Elementary School and the downtown business district.</p>	<p>APM LU-1: Compatibility with Land Uses in the Santa Margarita community.</p> <p>LU-1a: Prior to any commercial production or sales at the quarry, the Applicant shall prepare and submit a Traffic Control and Management Plan (TCMP) which be updated and resubmitted annually no later than July 1 of each year. The TCMP shall ensure that trucks arriving at or leaving the quarry reduce conflicts with peak pick-up and drop-off and bus arrival/departure times at Santa Margarita Elementary School, and also that truck traffic will not be active on the day of the annual Wildflower Ride. The Applicant shall obtain school start and end times from the Atascadero School District prior to July 1 of each year and shall coordinate with the San Luis Obispo Bike Club to determine the date of the Wildflower Ride for each year.</p> <p>LU-1b: The Applicant shall be responsible for funding the installation of a motion-generated flashing light</p>


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	<p>system to be embedded in the crosswalk at the intersection of SR 58 and H Street, subject to authorization by Caltrans and in accordance with Caltrans standards.</p> <p>LU-1c: All trucks hauling in and out of the project shall be required to abide by posted speed limits at all times and keep at 25 mph or less through the designated school zone. All drivers visiting the quarry must be provided with a printout advising them to obey these speed limits and use extra caution when driving through the school zone and the downtown area and advising them that the use of engine brakes is prohibited in these areas except in emergency situations.</p> <p>LU-1d: The Applicant shall establish a toll-free telephone hotline which members of the public may use to report any trucks or drivers that were observed exceeding the speed limits or driving unsafely. The Applicant shall investigate all reports, and shall take appropriate corrective and disciplinary action to prevent any further incidents. The Applicant shall provide a two-way radio or other communication device to the school crossing guards or school authorities so that they may directly contact the quarry or the scale house to report any incidents as they happen.</p>
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Legend
 Property Boundary
 Source: USGS 7.5' Quadrangle
 Santa Margarita, CA



<p>Figure ES-1</p>	<p>Project Location and Features</p>
	<p>Oster/Las Pilitas Quarry EIR San Luis Obispo County</p>

SECTION 1.0 INTRODUCTION

1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) assesses the environmental effects from the Las Pilitas Quarry proposed by Las Pilitas Resources, LLC. The project will require approval of a Conditional Use Permit (CUP) and Reclamation Plan by San Luis Obispo County. The County case number is: DRC2009-00025. The proposed quarry and related improvements would occupy approximately 41 acres within the 234 acre property, in the Las Pilitas Plan Area north of State Route 58 (SR 58) and east of the Salinas River, approximately three miles northeast of the Santa Margarita community. The property is designated Rural Lands and is covered by the EX1 (Extractive Resource Area) Combining Designation which extends over a large portion of the Las Pilitas Planning Area in recognition of the aggregate resources present in the La Panza granitic rocks there.

1.2 PURPOSE AND INTENDED USES OF THE EIR

The County of San Luis Obispo Department of Planning and Building has prepared this EIR as the Lead Agency under the California Environmental Quality Act (CEQA). The EIR is an informational document intended to provide descriptions of the environmental effects of the proposed quarry. It may be used by the County decision makers, other agencies, and members of the public in reviewing and considering the project. Although the EIR analyzes the environmental effects of the project and presents mitigation measures to reduce those effects, the final conclusions regarding environmental impacts will be made by the County Planning Commission, or Board of Supervisors if the Planning Commission action is appealed, as part of their environmental findings when considering the project.

1.3 PROJECT OBJECTIVES

1.3.1 Listing of Objectives

COSE Objectives

~~Concrete-grade~~ Aggregate resources, consisting of sand and gravel as well as crushed granitic rock is used in various construction applications including but not limited to Portland Cement Concrete (PCC) and Asphaltic Concrete (AC) pavement. These resources are ~~is~~-particularly important for road building and maintenance and other construction. Both the State of California (Busch and Miller 2011:1) and the San Luis Obispo County Conservation and Open Space Element (COSE – 2010: page 6.1) recognize the important role of aggregate minerals in supporting construction and economic growth within the region. The basic purpose of the proposed quarry is to contribute towards fulfillment of that role.

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Goals identified by San Luis Obispo County relative to the extraction and use of mineral resources are found in the Conservation and Open Space Element, (COSE, San Luis Obispo County May 2010: Goals MN1 through MN3). These goals form the first two objectives of the project:

- A. Develop significant mineral deposits in a manner that protects sensitive natural resources and existing adjacent uses, and is consistent with other County general plan goals and policies.
- B. Protect significant mineral resources from land uses that threaten their availability for future mining.

Site-specific Market Objectives

The project site is within the La Panza Granitics EX1, (Extractive Resource Area) Combining Designation in the Las Pilitas Planning Area (discussed more in Section 1.3.2 below), and has been planned for an aggregate quarry by the property owner for twenty years. When the Coastal Branch of the California Aqueduct was constructed, the final condemnation agreement between the state and the property owner contained several features in recognition of the currently proposed aggregate mining use. These included the construction by the state of two reinforced crossings within the property that would allow heavy trucks to drive over the buried pipeline. The agreement also defined a buffer along the pipeline route, outside of which blasting for aggregate mining would be allowed. Thus, there are market objectives associated with this application as well as the conservation goals noted above. These two objectives are stated as follows:

- C. Develop known ~~concrete-grade~~ aggregate reserves in the local production-consumption region in accordance with previous planning and coordination with the California Department of Water Resources, state policy, the County EX1 Combining Designation, and applicable regulations.
- D. Provide an additional source of aggregate material in the local production-consumption region, with a permitted production of up to 500,000 tons/year for approximately 30 years, consistent with state policy, the County EX1 Combining Designation and applicable regulations, and in a manner that supports independent contractor and other local use groups.

Recycling Objective

In addition to the goals above related directly to mineral resources, the County also has several policies and programs intended to promote sustainable development through measures to reduce energy consumption and the emission of carbon dioxide from transportation and other activities. One of these measures is to increase solid waste recycling (San Luis Obispo County COSE May 2010: page 5.18). A specific recommended measure in

the County's Climate Action Plan, as well as an implementation strategy in the COSE, is to increase the amount of construction and demolition waste recycling from construction projects from the current 50 percent requirement to 75 percent (San Luis Obispo County, Energywise Plan, November 2011: pages 5-31 and 5-32). With this goal in mind, another objective of the project is as follows:

- E. Contribute towards increased recycling of construction and demolition debris to help achieve an overall goal of 75 percent recycling for this type of waste material.

Transportation Objective

Recent California law (Assembly Bill 566 [Galgiani]) amended the Public Resources Code (PRC) to require the State Mining and Geology Board, upon request, to transmit information regarding the location of aggregate resources to metropolitan planning organizations (such as the Council of Governments in San Luis Obispo County). This information may then be used in regional transportation planning efforts. In passing the bill the legislature recognized that the production and development of local mineral resources "...are vital to reducing transportation emissions that result from the distribution of hundreds of millions of tons of construction aggregates that are used annually in building and maintaining the state" (PRC 2711(d)). Neither the COSE nor the County's Climate Action Plan contain a specific reference to locating aggregate mines or transportation of aggregate material, but both documents identify a general goal of reducing all transportation related emissions through measures intended to minimize vehicles trips and vehicle miles travelled (San Luis Obispo County Energywise Plan, November 2011: page 5-35, and COSE 2010:page 2.9). Thus, an additional objective of the project is as follows:

- F. Locate an ~~an concrete-grade~~ aggregate quarry as near as practicable to use areas in the San Luis Obispo-Santa Barbara Production-Consumption region, and with minimal reliance on local streets to gain highway and freeway access.

The following paragraphs provide more information about aggregate resources in the County and how the proposed quarry relates to the above objectives.

1.3.2 Background Information Regarding Objectives

All of the area proposed to be mined is covered by the EX1 Extractive Resource Area Combining Designation (San Luis Obispo County Las Pilitas Planning Area Rural Combining Designations Map, 2009), which is placed over a large portion of the Las Pilitas Planning Area (shown in Section 3.1 of this EIR). This Combining Designation recognizes the California Department of Conservation classification of the area as MRZ-2, which means that the State Geologist has identified these areas as containing significant deposits of aggregate material (San Luis Obispo County Las Pilitas Area Plan 2003: page 6-1). The project design and reclamation plan is intended to comply with the statute and regulations of

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the California Surface Mine and Reclamation Act (SMARA, found at 2 PRC 2710, and 14 CCR 3500) and with the County requirements found in Chapter 22.36 of the County Land Use Ordinance.

The State of California recognizes the importance of aggregate resources in supporting highway construction and maintenance and general economic activity. The State Mining and Geology Board develops guidelines for mineral land classification, which require that the State Geologist classify specified areas into Mineral Resource Zones, such as the MRZ-2 classification noted above. The most recent update of the classification study including San Luis Obispo County was prepared in 2011 and describes other requirements as follows (Busch and Miller 2011:3):

The guidelines also require that classification reports for construction aggregate resources include the following additional information: (1) the location and estimated total quantity of construction aggregate in areas with land-uses compatible with potential mining; (2) limits of the market area that these potential resources would supply; and (3) an estimate of the total quantity of aggregate material that will be needed to supply the area for the next 50 years.

The market areas defined in the estimates prepared by the California Geological Survey are known as “production-consumption” regions. San Luis Obispo County and Santa Barbara County are evaluated as a single production-consumption region for purposes of estimating the supply and demand for aggregate resources. Current and past estimates of aggregate material supply and demand within this local production-consumption region are summarized in Table 1-1 below.

**TABLE 1-1
SUMMARY OF DEMAND AND SUPPLY ESTIMATES FOR AGGREGATE
MATERIAL IN THE SAN LUIS OBISPO-SANTA BARBARA
PRODUCTION-CONSUMPTION REGION**

Year	Estimated 50-Year Demand (million tons)	Estimated Permitted Production (million tons)	Reference
1989	205.8 (76.2 must be PCC aggregate grade)	107	Miller et al 1989:Table 10 and Table 7
2001	99	93	Kohler 2006:Table 3 and Table 2
2006	243	77	Kohler 2006:Table 1
2011	262.6 (136.6 must be concrete-grade)	75	Busch and Miller 2011: Table 4 and Table 2

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The following points summarize information from the above table:

- The 50-year demand for aggregate resources in the region is approximately 263 million tons. Approximately 40% of this amount (126 million tons) will be for non-concrete grade material, such as rip-rap, drain rock, road base, and similar aggregate materials used in other construction activities.
- The current permitted aggregate production for the same time projection amounts to 75 million tons, or 29 percent of the 50-year demand.

Through consolidation and vertical integration in the aggregate and construction industry, the two major nearby granitic surface mines are now operated by large national or international construction companies. Cal Portland Construction, Inc. (a subsidiary of Taiheiyo-Cement Corporation) operates the Rocky Canyon Quarry; and Heidelberg Cement Company owns Lehigh Hanson Aggregates, which operates the Santa Margarita Quarry adjacent to the project site. While both of these producers are major suppliers of aggregate material, they also compete with local businesses for other material supply and highway construction and repair contracts. Other aggregate suppliers exist in the larger production-consumption region, but are not as conveniently located to serve the San Luis Obispo County and nearby market areas. The Las Pilitas Quarry is proposed in part to help improve the overall regional balance between projected supply and demand for aggregate material, and in part to provide an additional independent source of material to support local business, public works departments, and other local customers. Additional information regarding the locations of other aggregate mines in the region and the economics of aggregate mining and transport is provided in Appendix D as part of the background information related to air quality.

Access to the property is directly from SR 58, and most of the property consists of steep hillsides covered with chaparral and sage scrub vegetation. The proximity to SR 58, while advantageous for project-related truck traffic, also makes the site directly visible from this highway. The steep hillsides and natural vegetation on the property are aesthetic and biological resources characteristic of this region. Addressing these other natural resource values is part of the challenge for any mining plan in this region. The project is designed with the intent of balancing the proposed mining with the conservation of other resources in a phased approach (described in more detail in Section 2.3 below). The project would first construct the access and facilities to support the mining, then mine and grade access to the most extensive granitic rock portions of the property while reclaiming disturbed areas as work progresses.

The project design also includes the permanent conservation of 68.8 acres of the property, which would be retained in its current condition as undisturbed native habitat. The existing ranching uses on the southern portion of the property would continue during and after completion of the proposed mine. The proposed conservation program would preclude the development of future residential or other uses over the conservation area. This conservation

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area will serve a dual purpose by preserving the biological and scenic resources associated with the land, and limiting the potential for future development that may be incompatible with future mineral extraction that may occur in nearby areas.

The recycling component of the project would include the receipt, temporary storage, and re-sale of PCC and AC material within the local market area. This proposed activity is described in more detail below, but is intended to help conserve aggregate resources; the amount of this recycled material would be within the maximum of 500,000 tons of product per year anticipated with the project.

1.4 PERMITS AND AGENCY REVIEW

1.4.1 County of San Luis Obispo and Office of Mine Reclamation

The primary governing approvals for the project are the Conditional Use Permit (CUP) for the surface mine and the Reclamation Plan required by the County and by SMARA. The CUP is required by County Code for “mines and quarries” as a resource use in the Rural Lands category (see Table 2-2 in Section 22.06 of the Land Use Ordinance [LUO]). The specific permit requirements for this type of use (mining) and Reclamation Plan requirements are found in Section 22.36 of the County Code.

Since the project site is located within the Extractive Resource Area (EX1) combining designation addressed in Chapter 22.14 of the LUO, the recycling component of the project may be governed by Section 22.14.050. In particular, Section 22.14.050 (B)(2) states: “Approval of any use other than mineral resource extraction may be granted only when the finding is made that the proposed use will not adversely affect the continuing operation or expansion of a mineral resource extraction use.” Other requirements related to recycling and storage yards are also set forth in Section 22.30.560, and these can be applied to the project as appropriate through the CUP.

The County Planning and Building Department reviews the application for the CUP, develops conditions for the project, and makes recommendations to the County Planning Commission who has approval or denial authority over the CUP. The Planning Commission approval or denial may also be appealed to the County Board of Supervisors.

Approval of the Reclamation Plan that meets the requirements of SMARA and the County SMARA Ordinance is required by the County prior to any surface mining operation (Section 22.36.050). The California Department of Conservation, Office of Mine Reclamation (OMR), has reviewed and commented on the Reclamation Plan. The County is required to consider and respond to the OMR comments and to notify OMR prior to any public hearing for the project (PRC 2774(c)–(e)).

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Other County permit approvals, such as for the installation of a new septic tank and leach field, will also be accomplished by the Planning and Building Department as part of the review and permitting of grading and building plans.

No fuel storage tanks, vehicle maintenance facilities, or similar activities are proposed with this project. No explosives or blasting material will be stored on-site. Therefore, it is not anticipated that the mine operator will be required to have hazardous materials handling and storage permits. If such permits are required, they would be issued by the County Environmental Health Services (EHS) Division of the Public Health Department, upon review of required hazardous materials management plans.

The County of San Luis Obispo serves as the CEQA Lead Agency in preparing the EIR for the project. The OMR may review and comment on the EIR, as well as the Reclamation Plan. Beyond these two major authorities, the following agencies will have review and/or approval authority over the project.

1.4.2 CalRecycle

The California Department of Resources Recycling and Recovery (CalRecycle), implements statutes and regulations related to solid waste management. For San Luis Obispo County, CalRecycle also serves as the Enforcement Agency for applicable solid waste and recycling regulations. The PCC and AC recycling component of the project is subject to the authority of CalRecycle. A full Solid Waste Facility Permit would be required if the project handled 1,500 tons per day or more of this recycled material. For smaller daily operations (less than 1,500 tons per day), a simpler Notification is required (14 CCR 17381.2). Some of the applicable requirements for this type or permit are presented in the Project Description (Section 2.3.1), and the detailed requirements are at 14 CCR 17383.7. The Notification must also be accompanied by an Inert Debris Type A Processing Operations Plan. As part of their review, CalRecycle must determine that the Operations Plan is complete and correct as required by regulations. Also, CalRecycle must conduct inspections of the facility to help ensure compliance with all applicable regulations.

1.4.3 State Water Resources Control Board and Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) regulates discharges that may pollute surface or groundwater. Since the project is not proposing the use of water in any treatment or processing, it is not expected to seek Discharge Requirements from the Regional Water Quality Control Board (RWQCB). The main concern is the management of stormwater runoff from areas disturbed by mining and from project roadways, and processing areas. The project will be required to obtain coverage under the Statewide General Permit for construction activities and the Statewide General Permit for industrial activities, both issued by the SWRCB. These permits require the filing of a Permit Registration Documents

(construction permit) or Notice of Intent (industrial permit) and preparation of a Stormwater Pollution Prevention Plan with the incorporation of Best Management Practices in the project design and operation to minimize the potential for surface water pollution. The RWQCB will review the project and has the final authority to determine the appropriate water quality permits necessary for the project.

1.4.4 California Department of Fish and Game Wildlife

The project will involve grading and alteration of the seasonal drainage or swale that drains much of the quarry project site and exits the property near the center of its western boundary. This drainage leads to the Salinas River, which is located about 1,000 feet farther to the west. For drainages falling under Section 1600 of the state Fish and Game Code, the operator must have the agreement of California Department of Fish and Game (CDFG) before altering the streambed. Table 2-1 shows that Phase 2A of this project would be excavated over a period of 3 to 7 years after the start of the project.

1.4.5 California Department of Transportation

The project includes construction of the new access drive at SR 58, which will require work within the California Department of Transportation (Caltrans) right-of-way. It is also possible that other project related improvements (drainage controls, utility lines) may involve some work in the highway right-of-way. Project conditions of approval include off-site roadway or intersection improvements, or contributions to such improvements, which may also be in the Caltrans right-of-way. Any work in the Caltrans right-of-way requires an Encroachment Permit from that agency. Caltrans will also review this EIR and provide input to the County in the evaluation of traffic effects from the project.

1.4.6 California Public Utilities Commission

SR 58 crosses the Union Pacific Railroad (UPRR) tracks just east of El Camino Real at the northeastern edge of Santa Margarita. All railway crossings by public highways and roads require approval of the Public Utilities Commission (CPUC). In the event that alterations within the railroad right-of-way are necessary at this crossing, CPUC will have review and approval authority. UPRR would also be involved if alterations to their improvements are necessary. Even if no alterations are proposed at this location, both CPUC and UPRR may review and comment on the EIR.

1.4.7 US Army Corps of Engineers

Although the property containing the quarry site is adjacent to the Salinas River, the quarry itself would be over 1,000 feet from the river and no dredging, discharge, or other alteration of the river is proposed. If the grading and mining activity in the seasonal drainage mentioned above (in Section 1.4.4) is deemed to be an alteration of jurisdictional waters or

national wetlands by the Army Corps, then review under Section 404 of the federal Clean Water Act (CWA) will be necessary. This review may result in the determination that a permit is not necessary, or that the activity may be covered under an existing nationwide permit subject to conditions, or that an individual permit is necessary. The latter two cases also require certification by the RWQCB that the action will not affect water quality, pursuant to Section 401 of the CWA. Quarry activities in this portion of the project would be part of Phase 2A and would occur in the period of 3 to 7 years after the start of the project.

1.4.8 San Luis Obispo County Air Pollution Control District

As proposed, the project will not include a permanent rock crushing and sorting installation. Instead, portable equipment will be brought to the site periodically to process aggregate material as necessary. Such portable equipment is registered with the California Air Resources Board, with annual reports of operations, and does not receive a permit from the local Air Pollution Control District (APCD). The San Luis Obispo County APCD will review the project, however, including the emissions estimates related to construction activity as well as the overall operations proposed. This review may result in the identification of specific mitigation measures to reduce or offset emissions. The project is also still subject to APCD rules that restrict emissions of visible plumes or that cause a nuisance. It is also possible that the APCD may require a permit (Authority to Construct and Permit to Operate) for future use of rock processing equipment or some other aspect of the project.

1.5 READER'S GUIDE

This EIR has been prepared to include all of the contents as described in the CEQA Guidelines (14 CCR Article 9 starting at Section 15120). Most of the analysis and discussion of environmental topics is presented in Section 4.0, and its subsections that address the major environmental topics and specific issues within each topic. Within each of the topic subsections in Section 4, information is presented in the following order:

1. Existing Conditions
2. San Luis Obispo County Plans and Policies
3. Regulatory Setting
4. Assessment Methodology
5. Significance Criteria
6. Project Impacts and Mitigation Measures

The discussions of impacts and mitigation consider both direct and indirect effects of the project. These include effects that are on-site and off-site and effects that are immediate (related to construction) and long-term (related to operations).

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Cumulative effects are discussed as appropriate in each subsection, and are summarized in Section 5.0. For certain issues, the presentation of cumulative effects relies on a list of projects either recently approved or pending that would have effects contributing towards overall impacts related to that issue. For other topics (such as issues in traffic and air emissions), cumulative effects are evaluated through the use of regional projections.

The Executive Summary includes an abbreviated project description, and then a series of tables that incorporate all of the potential impacts and mitigation measures presented in Section 4.0. This section clearly identifies any impacts that are considered significant and not mitigable.

Section 2 presents the Project Description. Some of the CEQA Guideline content requirements for Project Description – specifically the Project Objectives and the Uses of the EIR – are presented in this Introduction (Sections 1.2 and 1.4 above).

Section 3 includes a brief Environmental Setting that provides some regional context for the project. More details regarding the setting relative to specific issues are presented in the Existing Conditions portions of each topic within Section 4.0.

Alternatives are presented in Section 6. The closing sections of the EIR present other discussions that are required by the CEQA Guidelines, including Significant Irreversible Environmental Changes, Growth Inducement, a discussion of energy consumption, and information related to the EIR preparation.

Background information for the EIR and various technical studies and related material are presented in a series of appendices. These include:

- Appendix A – Initial Study and Notice of Preparation and Scoping Comments
- Appendix B – Additional Project Description Information
- Appendix C – Associated Transportation Engineers – Traffic Impact Analysis
- Appendix D – Sespe Consultants – Air Quality (with several attachments)
- Appendix E – Noise Information, including:
 - E-1 – Dubbink and Associates Noise Study
 - E-2 – Traffic Noise Model Assumptions, Inputs, and Results
- Appendix F - Water Supply Assessment
- Appendix G – Traffic Index Calculations
- Appendix H – Expanded Reference Material

SECTION 2.0 PROJECT DESCRIPTION

2.1 LOCATION AND BOUNDARIES

The proposed Las Pilitas Quarry surface mine and related disturbance areas would occupy approximately 41 acres of a 234-acre property located approximately three miles northeast of Santa Margarita on the north side of State Route 58 just east of the Salinas River. Access to the property is directly from SR 58, which is a two-lane state highway extending from US Highway 101 (four miles to the west) to the easterly county line. Figures 2-1 and 2-2 show the project location and vicinity.

The property is located at 6660 Calf Canyon Road (SR 58), and includes Assessor's Parcel Numbers (APN) 070-141-070 (78 acres) and 071 (156 acres).

The project site is within Section 10, Township 29 South, Range 13 East, Mt. Diablo Base and Meridian, on the Santa Margarita CA 7.5 minute USGS quadrangle. Specifically, it includes:

- APN 070-141-070: E/2 of the SW/4 of Section 10
- APN 070-141-071: W/2 of the SE/4, NE/4 of the SE/4, and SE/4 of the NE/4 of Section 10

The approximate center of the proposed quarry site within the property is located at: 35°24'53.5"N and -120°33'55.5"W.

The property is within the County's Las Pilitas Planning Area and is designated as Rural Lands (San Luis Obispo County 2014). The quarry site is also covered by the EX1 Extractive Resource Area Combining Designation (San Luis Obispo County 2010). The land in and around the property consists of vacant steep hillsides (slopes typically over 50 percent) supporting natural vegetation, and flatter areas along drainages (slopes typically less than 10 percent) containing rural residences with grazing and similar ranch uses. Two residences, a barn and storage sheds are located in the flat southern portion of the property, which is also used for limited cattle grazing. These uses will remain on the project site whether or not this project is approved. The Coastal Branch of the California Aqueduct was constructed across the southern portion of the property north of SR 58 in the late 1990s. This 54-inch buried water pipeline delivers water from the California State Water Project to communities in San Luis Obispo and Santa Barbara Counties. Planning and construction of the Coastal Branch included two reinforced crossings to support quarry truck traffic and setback specifications recognizing the intent to develop a quarry on the property. Further information about this pipeline is presented in various sections of this EIR, including Section 1.3.1 (page 1-2,

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related to Project Objectives) and Section 6.0 Alternatives. Rural residences are located south of the central and southwestern portions of the property and along Parkhill Road to the southeast of the property. The Santa Margarita Quarry of Hanson Aggregates (Heidelberg Cement Co.) is located to the west and northwest of the property.

More information regarding the project vicinity and surrounding lands is in Section 3.0, Environmental Setting; and a specific discussion of Land Use is in Section 4.14 of this EIR.

2.2 PROJECT OBJECTIVES

Section 1.3 of this EIR presents a more detailed discussion of the project objectives along with an introductory background discussion of the aggregate industry and how the project relates to the identified objectives. As a brief summary of that discussion, the objectives are presented in the following points:

- A. Develop significant mineral deposits in a manner that protects sensitive natural resources and existing adjacent uses, and is consistent with other County general plan goals and policies.
- B. Protect significant mineral resources from land uses that threaten their availability for future mining.
- C. Develop known ~~concrete-grade~~ aggregate reserves in the local production-consumption region in accordance with previous planning and coordination with the California Department of Water Resources, state policy, the County EX1 Combining Designation, and applicable regulations.
- D. Provide an additional source of aggregate material in the local production-consumption region, with a permitted production of up to 500,000 tons/year for approximately 30 years, consistent with state policy, the County EX1 Combining Designation and applicable regulations, and in a manner that supports independent contractor and other local use groups.
- E. Contribute towards increased recycling of construction and demolition debris to help achieve an overall goal of 75 percent recycling for this type of waste material.
- F. Locate an ~~concrete-grade~~ aggregate quarry as near as practicable to use areas in the San Luis Obispo-Santa Barbara Production-Consumption region, and with minimal reliance on local streets to gain highway and freeway access.

2.3 PROJECT CHARACTERISTICS

2.3.1 Overall Description

The applicant is requesting a 25- to 58-year timeframe for the mining operation and phased reclamation of the mined site, with a maximum annual production of 500,000 tons, a portion of which will be recycled asphalt and Portland cement concrete. Aggregate products that will be produced and sold include: rip rap, drain rock, landscape wall rock, decorative rock, decomposed granite for landscaping applications (trail pathways, etc.), road base, and non-expansive fill material. “Washing” (i.e., wet processing) is not required for any of these aggregate materials, and this process is therefore not evaluated in this EIR. In the event that aggregate material washing is proposed in the future, additional CEQA review would be required. The project will result in the disturbance of approximately 41 acres on two parcels that total approximately 234 acres in size. The proposed project is located at 6660 Calf Canyon Way (north side of SR 58), east of the Salinas River Bridge and approximately 0.25 mile west of the Parkhill Road intersection, and approximately three miles east of the community of Santa Margarita. The site is in the Las Pilitas Planning Area, within the Rural Lands category and the Extractive Resource Area (EX1) Combining Designation Overlay.

Major Stages and Phasing

The proposed project would be implemented in two overall stages including the following components:

- **Initial Stage:** As defined by the applicant and presented in the County’s Notice of Preparation/Initial Study prepared for this project, the “initial stage” of the quarry development would consist ~~Consists~~ of installing a truck scale, portable office, access road construction and landscaping. In order to create a flat operations area north of the scale and scale house, additional grading will be necessary, which will extend into the first phase of the quarry operation (called Phase 1A). The production of aggregate material would start with removing and stockpiling overburden for future reclamation use, and excavating, processing and stockpiling of decomposed granite (DG) and granite rock. This initial extraction would occur towards the center of the site, extending towards the north and northeast. Processing of excavated material will be done by portable crushing and screening equipment as needed. According to the applicant, this phase could yield up to 500,000 tons of material annually and last approximately 2-5 years. Based on the estimated amount of material in Phase 1A, if the quarry activity in this area were to last for 5 years, then the annual rate of production would be about 194,000 tons per year. Thus, the annual rate influences life of the phase and of the entire project. ~~establishes a yearly maximum for the life of the project.~~ For example, if the maximum rate of production is maintained at 500,000 tons per year for the duration of the project, then the useful life of the aggregate quarry will be about 25 years.

**FINAL EIR OSTER/LAS PILITAS QUARRY
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- Ongoing Operational Stage:** Consists of continued excavation, processing and stockpiling of DG and granitic rock at the same annual rate (maximum of 500,000 tons/year). ~~In addition, this stage of operations would include the recycling of concrete and asphalt within the maximum annual production rate of 500,000 tons/year.~~ Rock and recycled material would be processed by portable equipment. Reclamation would proceed as the benches of the mine are excavated and established. The eastern slope, visible to eastbound traffic on SR 58, would be the first area to be reclaimed. Mining would continue to the north and west, behind the ridge located to the west of the entrance. As mining progresses through the next phase of the project, reclamation would start within one year of excavation within that area. In addition, this stage of operations would include the recycling of concrete and asphalt within the maximum annual production rate of 500,000 tons/year. To the extent that recycled pavement material may displace the need for new aggregate, it may lead to a longer quarry lifetime.

A summary of each of the mining phases is presented below in Table 2-1, and Figures 2-3 and 2-4 show the general location for excavation and reclamation within each phase. The remaining Figures (2-5 through 2-11) show the grading upon completion of each phase and the final site configuration after reclamation activities. Grading plans for all of the phases are provided in Appendix B.

**TABLE 2-1
SUMMARY OF PROPOSED MINE PHASING**

Phase	Description	Mined Volume (Cubic Yards)	Reclamation Area (Acres)	Approx. Time (Years)
Start	Construct access road, scale house, stockpile areas, related facilities	0 (cut and fill to establish grades for access road)	0	0.5
1A	Benches into slopes north and northeast of scale house, to reach main quarry area, preserve southeastern ridge	472,353	0	2-5 years
1B	Continue north with benches and start benches to the west behind the southwest ridge	721,979	1 (adjacent to southeastern ridge)	3.5-7 years
2A	Benches into slopes to north and northwest, establish main quarry detention pond	653,564	1.7 acres (along western limit)	3-7 years
2B	Continue mining towards the north and east, increasing size of main detention pond as quarry grows	445,532	0.7 acres (along western limit)	2-5 years

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3A	Main quarry, extending benches into slopes towards north and northeast, to reach existing ridgeline	1,641,601	11.6 acres (along slopes as final elevations established)	8-19 years
3B	Main quarry to north limits, Establish final benches	1,289,092	14.1 acres (along slopes as final elevations established)	6-15 years
Final		0	17 acres (restore/revegetate flat areas)	1
Totals		5,224,121	46.1	25-58

The numerical information in Table 2-1 is drawn from the original project application, and is an approximation of the anticipated mine volumes, reclamation areas, and estimated time periods. The figures illustrate the fact that the initial phases of mining activity (1A and 1B) are designed to provide access into the central portion of the quarry. After that stage is complete, the operational stage will include an extension of mining to the north and northwest to establish drainage and the location for the main quarry detention basin (2A and 2B). The major portion of the quarry activity, with more than half of the total mined volume, would occur in the last two phases (3A and 3B). The table also illustrates the phased reclamation approach, which involves revegetating final slopes as they are created along the perimeter of the mine. The current estimate of the area of disturbance for the project is 41 acres, slightly smaller than the reclamation area estimated in the application. The actual figures may change slightly based on refinements in the project design and in response to market demand that influences the rate of mining, but these differences would not substantially change the overall design or the evaluation of project effects in this EIR.

For most projections used throughout this EIR, a production rate equivalent to the maximum annual production of 500,000 tons/year is assumed. If this production rate were maintained for the life of the quarry, then its useful lifetime would be 25 years. Given the range of estimates for the duration of the project in Table 2-1, the actual production rate could be less than this value and if the project lasted 58 years the average annual rate would be just less than 200,000 tons per year. For example, if recycling of pavement material significantly displaces the need for new aggregate, then the production rate of new aggregate may be less than 500,000 tons per year. In that event, the lifetime of the project could extend beyond the numbers identified in Table 2-1.

Operational Details

The proposed mining operation would commence with clearing of vegetation and topsoil overburden from the area of excavation for later use. The aggregate material will then be removed by a wheel loader, hydraulic excavator and/or bulldozer for sorting by size and stockpiled for sale. Material would be loaded by a front end loader for the smaller material

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while large rocks would be loaded with a hydraulic excavator. Trucks would proceed to a scale for weighing and ticketing before leaving the site.

In the event that the source material becomes too consolidated to be ripped by heavy equipment, the aggregate material will be loosened by blasting. This process includes drilling a pattern of holes into the source material and adding explosives into the holes for detonation. Typically, blasting would be expected up to 20 times per year during daylight hours. A blasting notification program would be developed by the applicant to inform the County and neighboring property owners before such events. All blasting would be performed by a California Licensed blaster.

After rock material is freed from the quarry face, it will be brought down from the mine for sizing, sorting and stockpiled for processing. This processing would use diesel-powered portable equipment brought on to the site as needed depending on market demand. Such equipment typically operates under the Portable Equipment Registration Program of the California Air Resources Board. It is anticipated that processing equipment would be brought to the site and used four times per year, with a maximum use of four weeks per quarterly event, up to 100 days per year. Products will include rip rap and crushed rock of various sizes. Aggregate products that will be produced and sold include: rip rap, drain rock, landscape wall rock, decorative rock, decomposed granite for landscaping applications (trail pathways, etc.), road base, and non-expansive fill material. Washing is not required for any of these aggregate materials, and this process is therefore not evaluated in this EIR. In the event that aggregate material washing is proposed in the future, additional CEQA review would be required. A portion of the high quality material will be sorted for use in the manufacturing of building materials and sold for specialty applications, including aggregate for AC pavement. The remainder of the material would be sold for commercial applications that do not require high quality specifications (e.g., road base).

Operations and sales would take place between the hours of 6:00 a.m. and 5:00 p.m. Monday through Friday, which is approximately 250 days per year (excluding weekends and common holidays). During early morning hours (6:00 a.m. to 7:00 a.m.), activities would be limited to daily start-up activities and maintenance. There would be no blasting, operation of heavy earth moving equipment, rock processing, loading, or similar noisy activities during the early morning period.

Reclamation and Revegetation

Reclamation of the site would consist of slope preparation and revegetation to return to the mined areas to ranching and grazing uses. As the mining of designated areas is completed and operations have moved on from one bench to the next, the slope of the completed areas will be contoured as appropriate for revegetation. Finished slopes will be no greater than 1.5:1 ratio (1.5 feet horizontal for every 1 foot of vertical drop) with a 25-foot wide bench

**FINAL EIR OSTER/LAS PILITAS QUARRY
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every 50 vertical feet. The overall average slope would be 2:1. Benches would be sloped back into the hill with a swale at the bottom of the slope to control any stormwater runoff or debris that may roll downslope. Stockpiled overburden soils excavated from the site would be applied to the finished slopes to be reclaimed. The slopes would then be replanted with native vegetation prior to the rainy season to prevent erosion. Upon completion of the mining project, suitable flat areas would be returned to ranching and grazing uses.

Recycling

Asphalt and concrete debris from construction sites would be brought to the site for recycling. Material will be inspected and weighed, then unloaded into appropriate stockpiles for temporary storage before processing and re-sale. All materials accepted for recycling will be required to be free of oil, plastics, steel pipe, wood, or any other waste, and may not contain soluble pollutants in excess of water quality objectives (defined as “Type A” inert debris in 14 CCR 17381(k)(1)). The material would be processed by the same portable crushing and screening equipment that is used in the processing of the mined materials. The recycled material would be stockpiled for public sale and reuse. Management of this recycled solid waste is subject to regulation by the California Department of Resource Recovery and Recycling (CalRecycle). The State of California encourages such recycling by providing a simplified permitting system requiring only Notification to the Enforcement Agency (EA) for processing and recycling up to 1,500 tons per day of this type of material (that is, inert debris Type A only. See 14 CCR 17381.1, 17381.2 and 17383). Other requirements for this type of operation are set forth in 14 CCR 17381.1(2) (e), and include, but are not limited to, the following:

- Less than six months storage allowed for non-processed material
- Less than 18 months storage allowed for processed material
- Residual material shall be less than 10 percent by weight of the amount of debris received, calculated on a monthly basis
- Maximum amount of stored material is limited to 30 days times the daily acceptance amount
- Residual material must be removed every 48 hours (or other time approved by Enforcement Agency)
- Operations Plan must be filed along with Notification
- Applicant is responsible for recordkeeping to document all weights and other items
- Enforcement Agency (CalRecycle for San Luis Obispo County) must perform inspections

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The County of San Luis Obispo also has requirements applicable to this recycling activity, which include use of appropriate visual screening, and limits on the heights of storage piles.

The project does not propose asphalt production, or nighttime activities requiring nighttime lighting. In addition, the project does not include the storage of fuel on-site. Grading and loading equipment used on-site would be fueled by service trucks.

2.3.2 Equipment Inventory

Based on the operational description above, the following list presents an estimate of the heavy equipment that will be used in the project:

- Wheeled loader (2)
- Excavator (1)
- Bulldozer (1)
- Portable drill rig (1)
- Portable rock crushing plant (1)
- Water truck (1)
- Street sweeper (1)

The bulldozer and excavator would be used to free and move material from the quarry, particularly after periodic blasting events. If material is loose and easily accessible, then wheeled loaders may also be used in the excavation process. The need for blasting will depend on both on the nature of rock material as it is encountered and on the market demand and rate of production at the quarry. Based on the maximum production of 500,000 tons per year, it is anticipated that blasting will occur approximately one to two times per month (up to 20 times per year).

A wheeled loader would be used to move material in and out of stockpiles and for loading material into trucks for transport.

2.3.3 Trip Generation and Truck Traffic

The estimate of the average project trip generation by trip and vehicle types is summarized as follows:

- Employee trips: 10 trips/day
- Truck trips: 198 trips/day (aggregate deliveries)
75 trips/day (net increase for recycled materials)

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- Total truck trips: 273 trips/day

The truck trip estimate assumes an average aggregate truck load of 20.2 tons, maximum production of 500,000 tons per year, and delivery operations for 250 days per year. This gives an average of 99 truckloads per day, or 198 truck trips per day. Variations from this average number may be expected due to differences in production rates that would be caused by changing market demand, differences in loading trucks, and operating more or fewer days per year. These variations could lead to a smaller or larger number of daily truck trips. For example, keeping the other assumptions constant and increasing the truck loading to 22 tons, reduces the average daily truck trips to 182 (instead of 198).

Commencing with phase two (approximately five years after mining starts) the importation of PCC and AC pavement for recycling would tend to increase the number of daily truck trips. Assuming the maximum permit limit of 1,500 tons/day of recyclable material, and again assuming 20 tons per truck, leads to a theoretical increase of 75 truckloads or 150 truck trips per day. This maximum number, however, assumes that all of the recycling trucks leave the site empty after delivering material to be recycled. This is highly unlikely, since most pavement recycling operations involve discrete projects. For most of these projects, pavement to be recycled is removed from a roadway, taken to a center to be crushed and processed, and then returned to the same roadway for use in new pavement. Thus, many of the recycling trucks leaving the quarry site would be carrying recycled and/or new aggregate material to be used in the same paving project that generated material to be recycled. These backhauls of recycled material would displace truck trips associated with hauling fresh aggregate to the roadway site. The applicant believes that all of the pavement recycling operation would involve this type of specific roadway recycling, and there would be no net increase in truck traffic. This position is consistent with the operations of other pavement recycling facilities in the region and is common practice. There is, however, no specific standard or requirement that guarantees this practice and the applicant would not have the ability to create hot mix asphalt to place back on the roadway surface after recycling, therefore shoulder backing would be the primary material hauled in these situations. Due to these operational limitations, for For a conservative or reasonable worst case assumption, this EIR will use a 50 percent backhauling assumption – that is, it is assumed that the delivery and use of up to 1,500 tons of recycled material per day at the quarry site will result in 75 additional truck trips per day.

In summary, the aggregate mine project is expected to generate, on average, 198 heavy truck trips per day for the purpose of delivering aggregate material from the property to regional job sites. Adding in the deliveries of concrete and asphalt material to the project site for recycling, will increase this number of truck trips per day by 75. Thus, the estimate of the average daily truck trips for the entire project is 273. Employee trips, assuming from three to

FINAL EIR OSTER/LAS PILITAS QUARRY PROJECT DESCRIPTION

five employees making an average of two trips per day, would amount to 10 passenger vehicle trips per day.

It is also possible that for specific projects, these average numbers of trips per day may be exceeded for short periods, but only during an emergency situation necessitating aggregate materials and only with prior authorization from the Department of Planning and Building. Up to 800 truck trips per day may be anticipated during an emergency situation for a limited time and only until the specific emergency situation is resolved. ~~for a large project.~~

It is also possible that for specific projects, these average numbers of trips per day may be exceeded for short periods, but only during an emergency situation necessitating aggregate materials and only with prior authorization from the Department of Planning and Building. Up to 800 truck trips per day may be anticipated during an emergency situation for a limited time and only until the specific emergency situation is resolved. In other words, this trip generation rate of 800 trips per day is not reasonably foreseeable.

If an emergency project arises that would lead to a truck trip generation of up to 800 trips, it is likely that numerous CEQA regulations (e.g. Section 15269 of the CEQA Guidelines; Public Resources Code Sections 21080(b)(2), (3), or (4); and/or Section 21080.33 of the Public Resources Code) could exempt this “Emergency Project” from CEQA analysis. For the above reasons, the County of San Luis Obispo, as Lead Agency, does not consider this potential emergency project/situation, as defined by Section 21060.3 of the Public Resources Code, to have a significant impact.

Trucks would enter the site from SR 58, and proceed along the paved access road to the processing and stockpile area for loading. The internal loop circulation system would lead trucks to the weigh scale before departing. Employee parking is designated adjacent to the scale house and office.

Under normal circumstances, aggregate hauling trucks are not expected to queue or park within the project site other than for the purpose of being loaded at the processing area and stopping at the scale house. In typical operations, the sales hours are publicized and delivery trucks are directed to remain outside the local community area when the quarry is closed. If it is necessary for rapid delivery of aggregate in conjunction with specific contracts, however, there are several areas within the project site that can accommodate short-term parking of trucks. In the early phases in completing Phase 1A, there will be some area in the vicinity of the scale house where about six trucks could be parked. In addition, the paved access road within the project site could accommodate another 20 trucks along the entrance lane. As Phase 1A is completed, the flatter areas around the scale house will be larger, and more trucks could be staged in this area.

2.3.4 Drainage Control

The project will alter the rate and condition of runoff water from the existing slopes of the property, and the project includes the design of three detention basins and one swale system that will collect and detain runoff to allow sediment to settle out before discharge. The pond system is designed to control up to a 50-year storm event and discharge at a 2-year event rate. For smaller storm events, the drainage swale has been designed to allow controlled runoff.

2.3.5 Water Consumption and Wastewater

Due to the type of rock product proposed, and the nature of the granitic material to be mined, the applicant is not proposing to wash any of the material that is processed. Aggregate products that will be produced and sold include: rip rap, drain rock, landscape wall rock, decorative rock, decomposed granite for landscaping applications (trail pathways, etc.), road base, and non-expansive fill material. Washing is not required for any of these aggregate materials, and this process is therefore not evaluated in this EIR. In the event that aggregate material washing is proposed in the future, additional CEQA review would be required. The primary use of water by the project will be for dust control. Exposed granitic surfaces in the quarry would not generate much dust, but stockpiled soils and the action of mining equipment on quarry roads will require periodic watering to control dust. On a regular basis during dry weather, the water use for dust control will amount to about 4,000 gallons per day (the proposed quarry will use about 4,000 gallons of water per day for dust control, about 500 gallons per day for domestic purposes, and up to 1,000 gallons per day for irrigating revegetation as part of the mine reclamation, for a total of 5,500 gallons per day). The need for dust control will be minimized through paving the entire access road length within the property, up to and around the scale house. The use of dust control additives approved by the County Air Pollution Control District will help to minimize the volume of water necessary for this purpose in other areas. An existing well on the property near the Salinas River will supply water for dust control. When available, water would be pumped from the on-site detention ponds and used for this purpose.

As revegetation occurs in the reclamation phases, there will be additional water use to help establish new vegetation in some areas. SMARA regulations require that vegetation used for reclamation must be self-regenerating and sustainable without continued dependence on irrigation. Accordingly, irrigation for revegetation would be short-term, until growth is established. Because reclamation would be phased and occur concurrently with mining operations, the active reclamation area requiring short-term irrigation would be small relative to the size of the project and would change over time. The largest single revegetation area would be at the close of the project after mining has ceased, and would involve restoring the flat stockpile and operations area. The maximum irrigation water use estimated by the applicant is 1,000 gallons per day. An additional small amount of potable water will be used for the project employees. Irrigation and potable water would be obtained from an existing

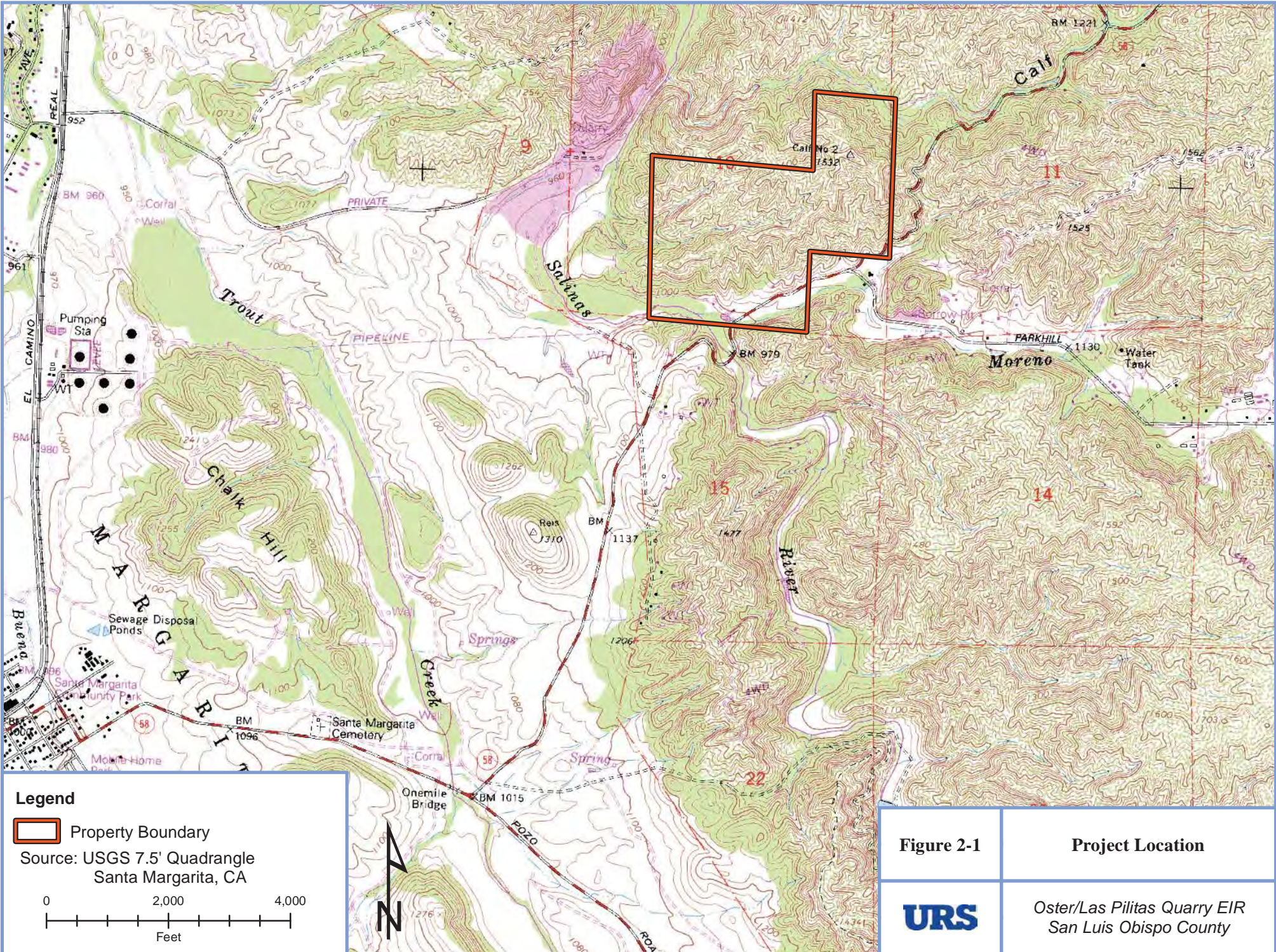
**FINAL EIR OSTER/LAS PILITAS QUARRY
PROJECT DESCRIPTION**

well on the property, located near the Salinas River (referenced as “Well A”). A new pipeline will be installed along the existing roadways on the property to connect the well to a new water tank atop the ridgeline preserved along the westerly edge of the quarry. The location of these proposed water facilities is shown in Figure 2-3.

The project design includes a new septic tank and leach field to serve on-site wastewater disposal needs associated with the proposed project. Appropriate percolation tests and design measures will be incorporated into the facility to minimize the potential for water pollution, in accordance with County requirements.

2.4 USES OF THE EIR

The County of San Luis Obispo Department of Planning and Building has prepared this EIR as the Lead Agency under the California Environmental Quality Act (CEQA). The EIR is an informational document to provide descriptions of the environmental effects of the proposed quarry. It may be used by the County decision makers, other agencies, and members of the public in reviewing and considering the project. Sections 1.2 and 1.4 provide more details regarding use of the EIR by the County and by other agencies with permit or review authority over the project.



<p>Figure 2-1</p>	<p>Project Location</p>
<p>URS</p>	<p>Oster/Las Pilitas Quarry EIR San Luis Obispo County</p>



**Hanson
Santa Margarita
Quarry**

Parkhill Rd

Salinas River

Salinas River

SR 229

SR 58

SR 58

Legend

 Project Boundary

Source: Microsoft Bing Map Mosaic by ESRI

1 inch = 2,000 feet

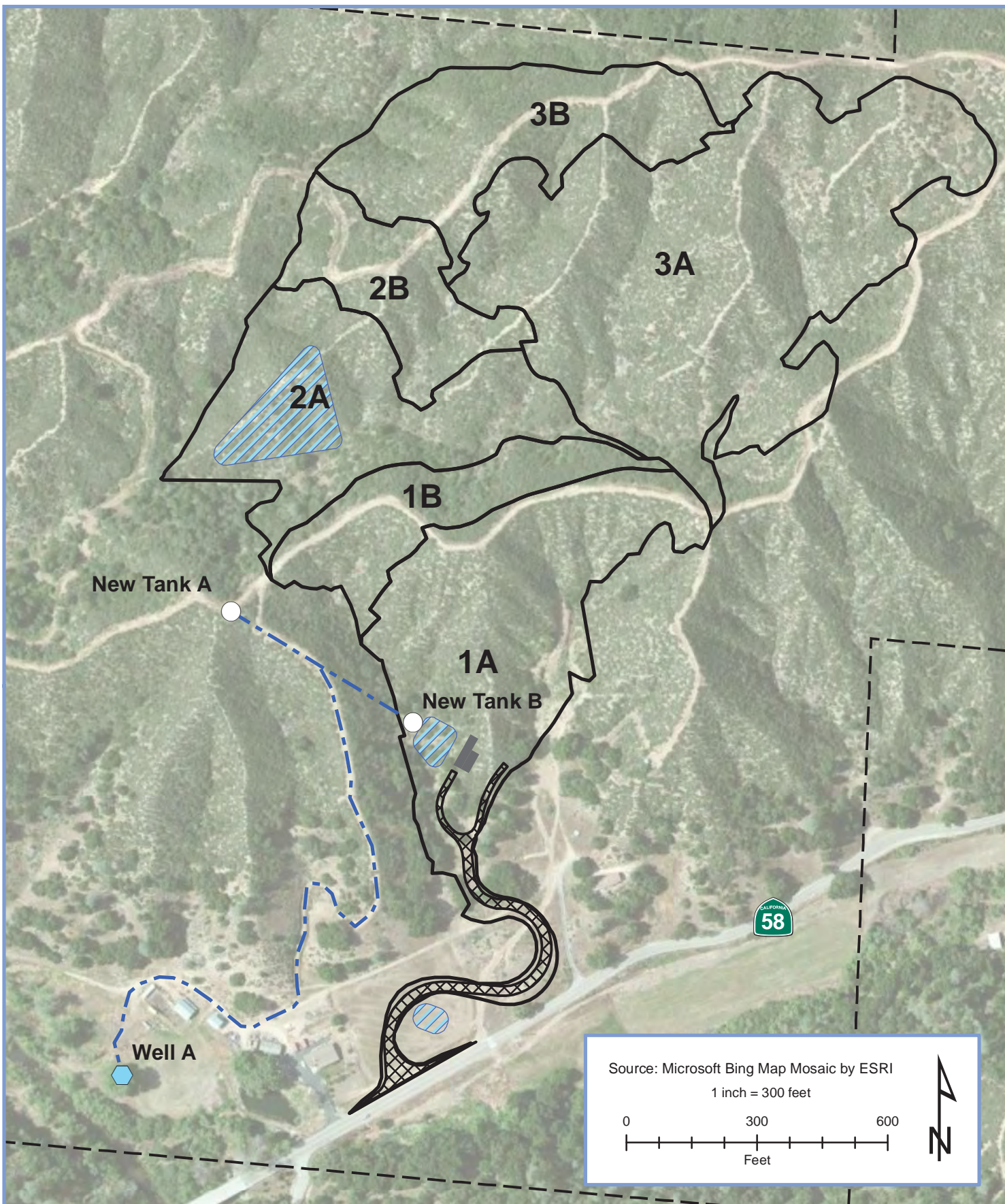


Figure 2-2

Project Location - Air Photo



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*



Source: Microsoft Bing Map Mosaic by ESRI
 1 inch = 300 feet

0 300 600
 Feet

Legend

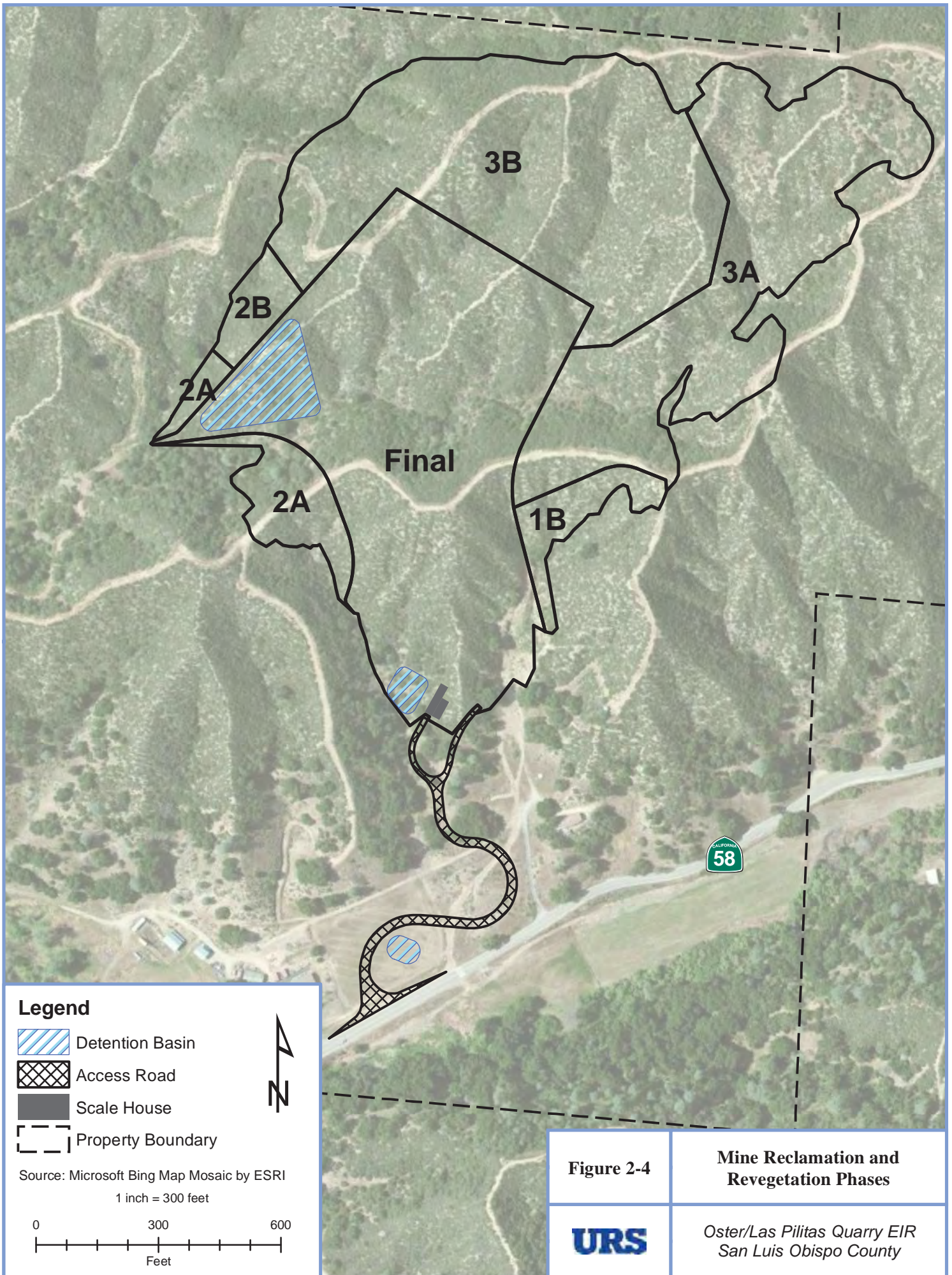
- Detention Basin
- Access Road
- Scale House
- Tank
- Well
- New Water Line
- Property Boundary

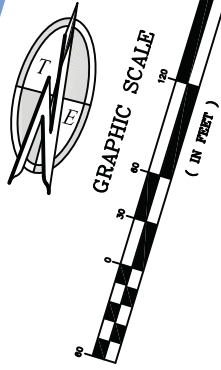
Figure 2-3

Mine Excavation Phases



*Oster/Las Pilitas Quarry EIR
 San Luis Obispo County*





MINING EXCAVATION:
 EXCAVATION: PHASE 1A
 EMBANKMENT: 472,353 CYDS.
 13,125 CYDS.



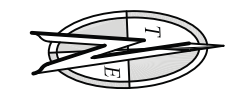
PHASE 1A
 DETENTION BASIN
 BOTTOM EL. = 1083
 WATER EL. = 1097.2
 TOP BASIN = 1097.2
 VOL = 36,500 CF
 (SEE SHT. 12)

REINFORCED
 CONCRETE CRIB
 WALL

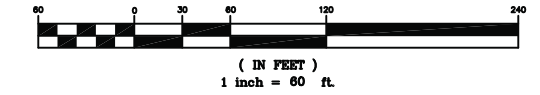
ENTRANCE ROAD
 DETENTION BASIN
 BOTTOM EL. = 1012
 WATER EL. = 1015.8
 TOP BASIN = 1015.8
 VOL = 6,000 CF
 (SEE SHT. 12)

DENSE TREES AND
 GROUND NOT VISIBL

E. ATAGLIA ENGINEERING
 3/31/2010



GRAPHIC SCALE



MINING EXCAVATION:
PHASE 1B
EXCAVATION: 721,979 CYDS.
EMBANKMENT: 0 CYDS.

PHASE 1B
DETENTION BASIN
BOTTOM EL. = 1083
WATER EL. = 1098.4
TOP BASIN = 1099
VOL. = 50,820 CF
(SEE SHT. 13)

REINFORCED
CONCRETE CRIB
WALL

ROC RIP-RAP

SCALE HOUSE
TRUCK SCALE

EXIST.
WATER
TANK

DENSE TREES AND
GROUND NOT VISIBLE

HWY
58

T:\PROJECTS\Oster Quarry\Maps\Figure 2-6 Phase 1B.pdf

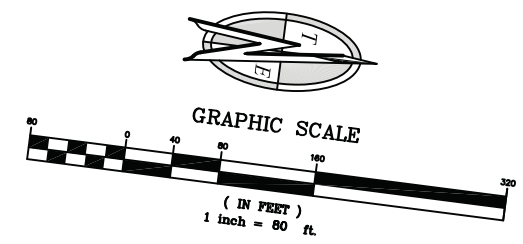
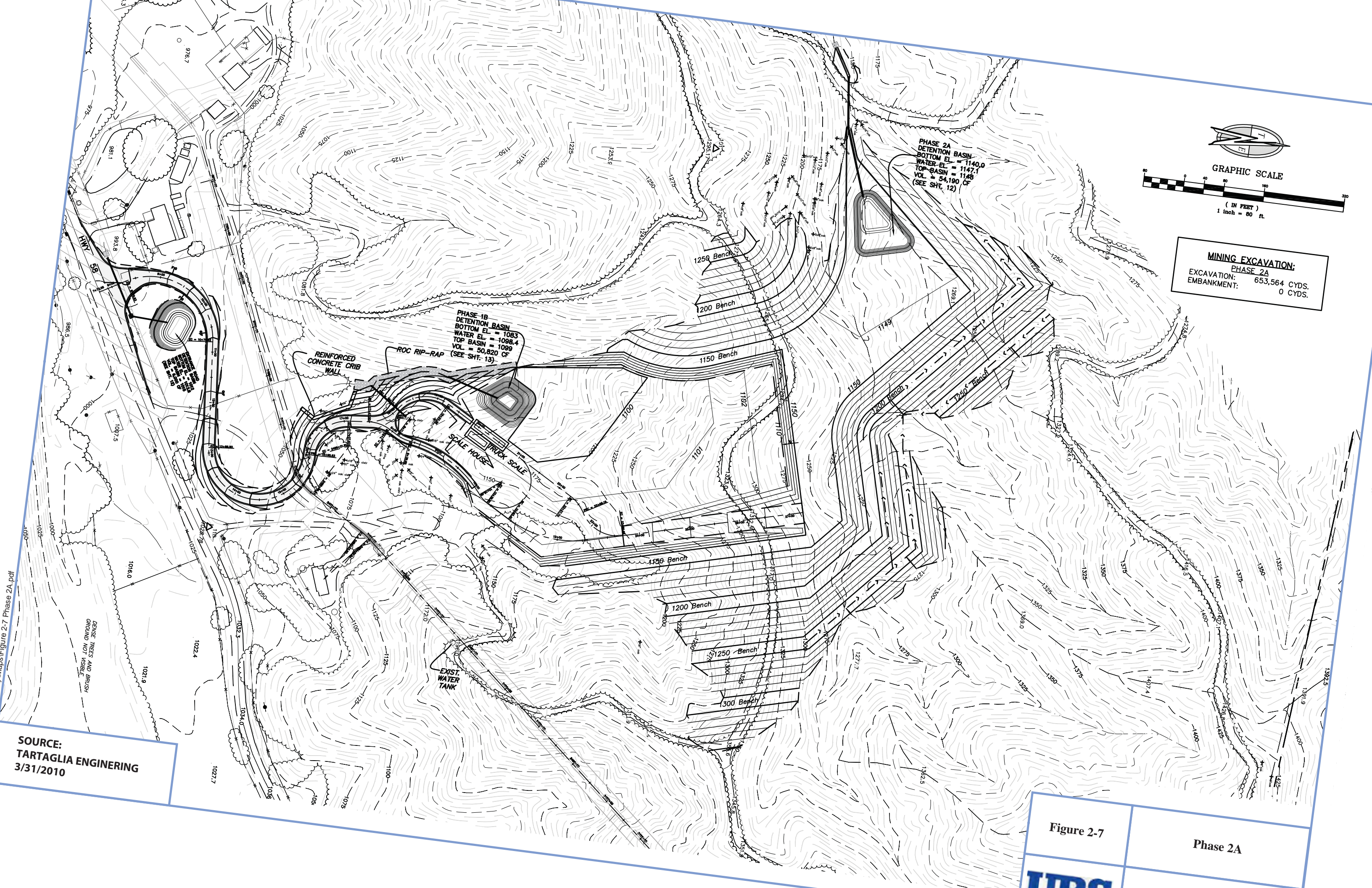
SOURCE:
TARTAGLIA ENGINEERING
3/31/2010

Figure 2-6

Phase 1B



Oster/Las Pilitas Quarry EIR
San Luis Obispo County



MINING EXCAVATION:
PHASE 2A
 EXCAVATION: 653,564 CYDS.
 EMBANKMENT: 0 CYDS.

PHASE 2A
 DETENTION BASIN
 BOTTOM EL. = 1140.0
 WATER EL. = 1147.1
 TOP BASIN = 1148
 VOL. = 54,190 CF
 (SEE SH. 12)

PHASE 1B
 DETENTION BASIN
 BOTTOM EL. = 1083
 WATER EL. = 1088.4
 TOP BASIN = 1089
 VOL. = 50,820 CF
 (SEE SH. 13)

REINFORCED
 CONCRETE CRIB
 WALL

SCALE HOUSE

TRUCK SCALE

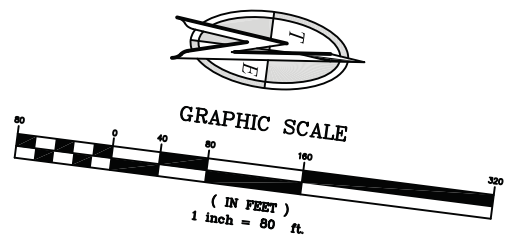
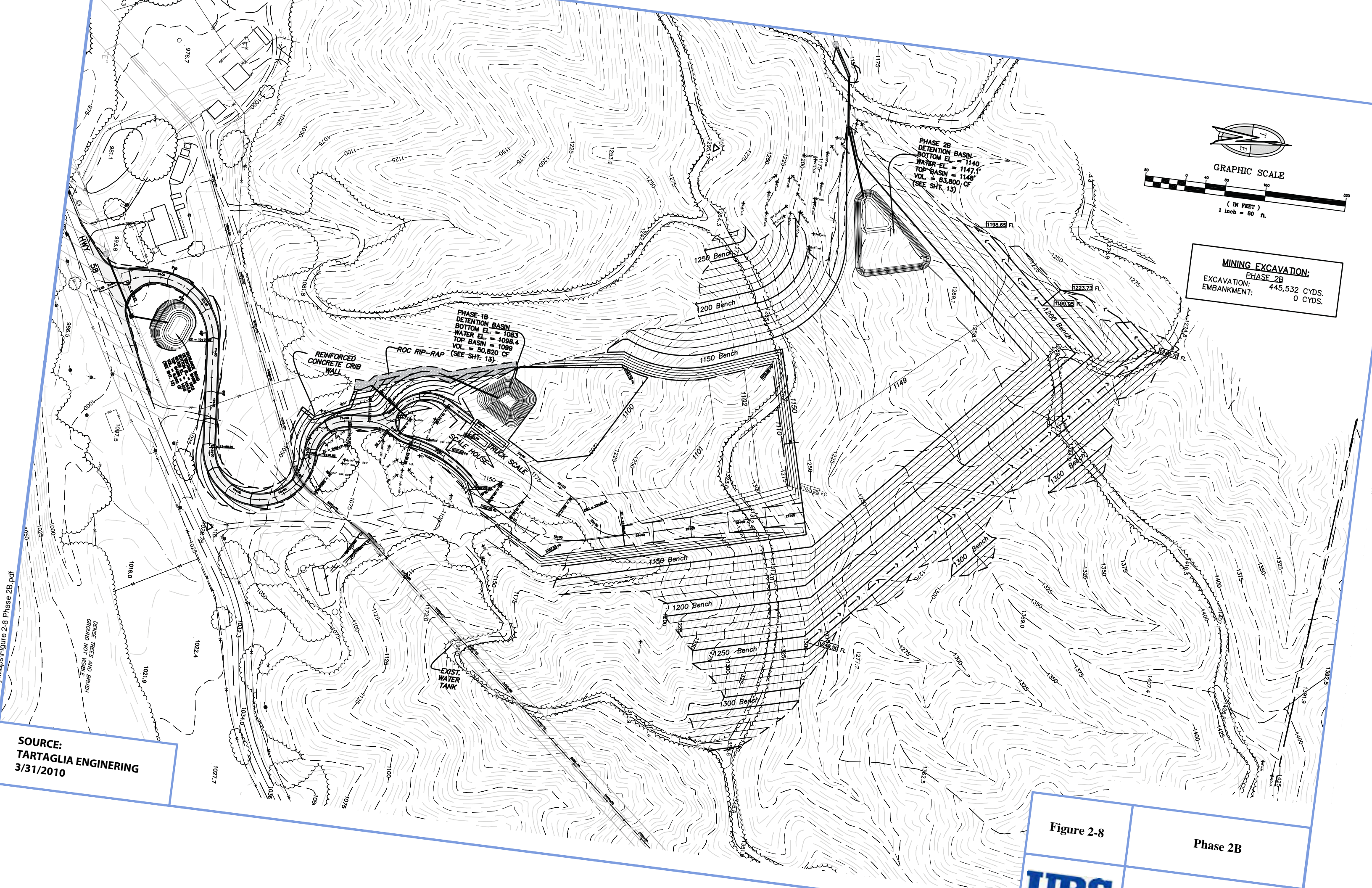
EXIST.
 WATER
 TANK

DENSE TREES AND BRUSH
 GROUND NOT VISIBLE

SOURCE:
 TARTAGLIA ENGINEERING
 3/31/2010

Figure 2-7
 Phase 2A





MINING EXCAVATION:
PHASE 2B
 EXCAVATION: 445,532 CYDS.
 EMBANKMENT: 0 CYDS.

**PHASE 1B
 DETENTION BASIN**
 BOTTOM EL = 1083
 WATER EL = 1088.4
 TOP BASIN = 1099
 VOL = 50,820 CF
 (SEE SH. 13)

**PHASE 2B
 DETENTION BASIN**
 BOTTOM EL = 1140
 WATER EL = 1147.1
 TOP BASIN = 1148
 VOL = 83,800 CF
 (SEE SH. 13)

REINFORCED
 CONCRETE CRIB
 WALL

SCALE HOUSE
 TRUCK SCALE

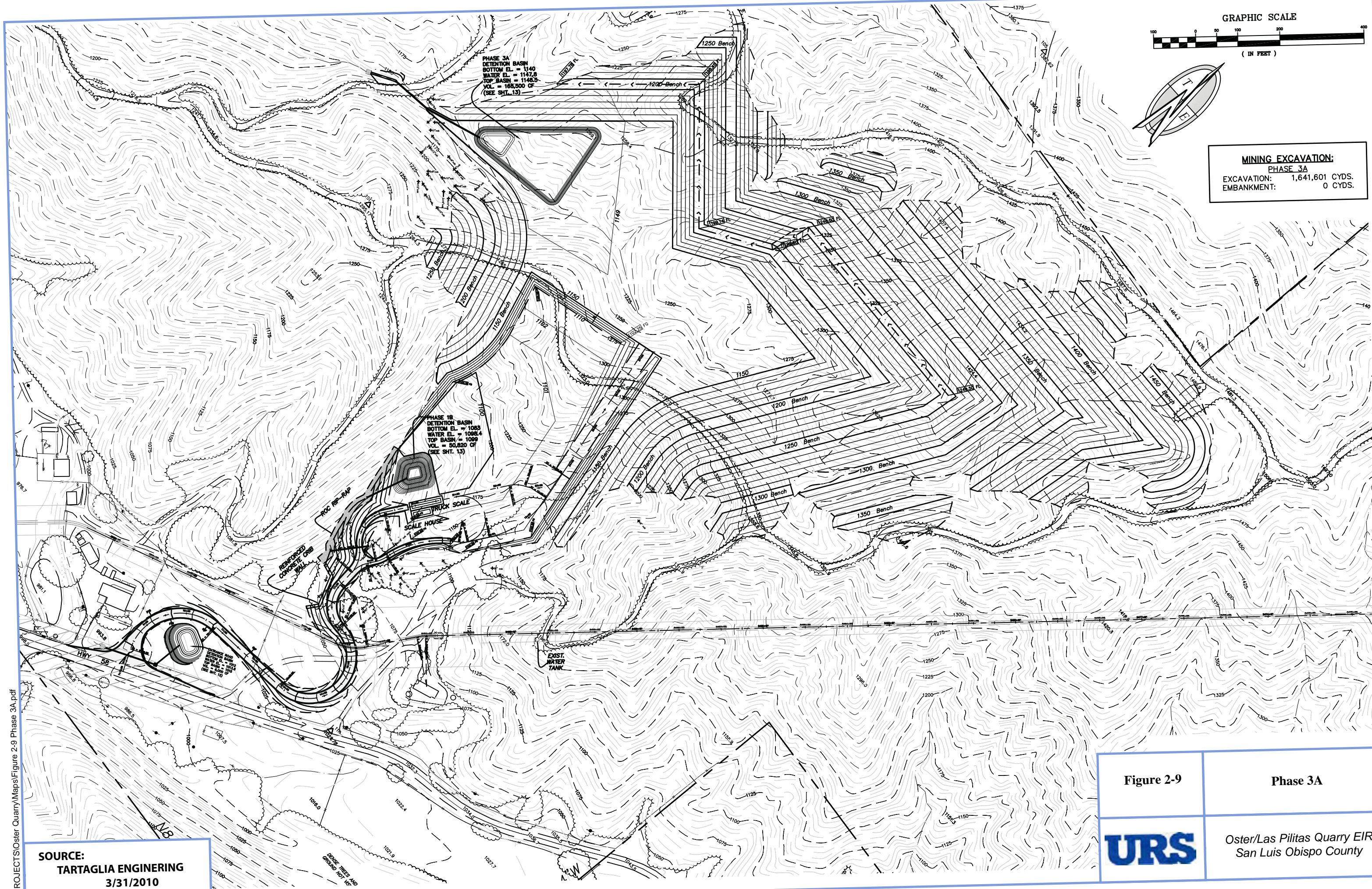
EXIST.
 WATER
 TANK

SOURCE:
TARTAGLIA ENGINEERING
3/31/2010

Figure 2-8

Phase 2B





MINING EXCAVATION:
PHASE 3A
 EXCAVATION: 1,641,601 CYDS.
 EMBANKMENT: 0 CYDS.

Figure 2-9

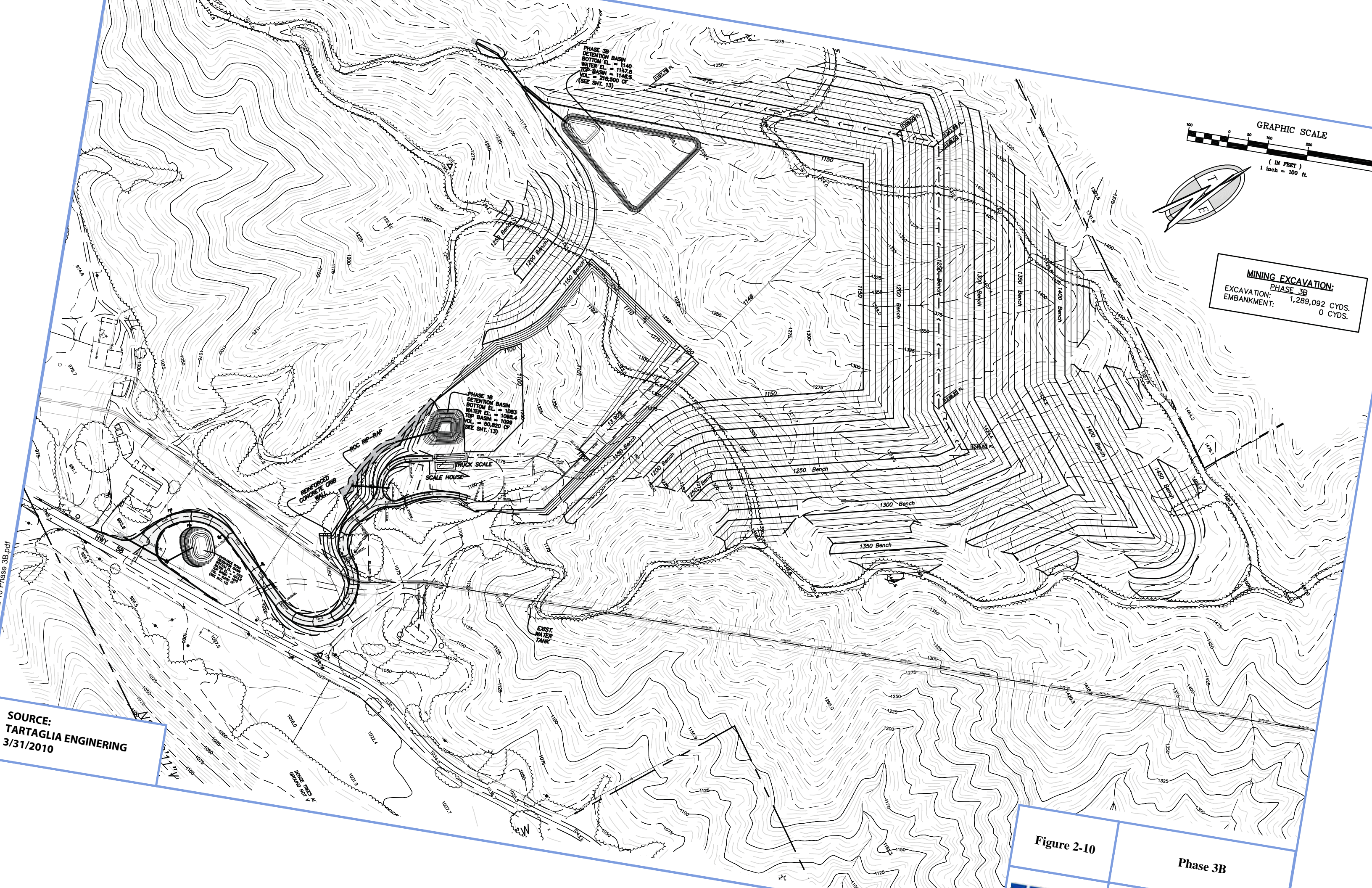
Phase 3A



Oster/Las Pilitas Quarry EIR
 San Luis Obispo County

SOURCE:
 TARTAGLIA ENGINEERING
 3/31/2010

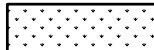





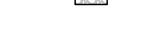
T:\PROJECTS\Oster Quarry\Maps\Figure 2-9 Phase 3A.pdf



SOURCE:
 TARTAGLIA ENGINEERING
 3/31/2010

Figure 2-10
 Phase 3B

EROSION CONTROL LEGEND

-  INDICATES DESIGNATED AREAS TO BE REVEGETATED WITH LOCAL NATIVE PLANT SPECIES.
-  HYDRO-SEED AREAS
-  FIBER ROLL INSTALLATION
-  DRAIN INLET/CULVERT PROTECTION
-  PERMANENT EROSION CONTROL MATERIALS TO REMAIN
-  TEMPORARY EROSION CONTROL MATERIALS TO BE REMOVED AFTER SOIL STABILIZATION AND VEGETATION IS ESTABLISHED
-  ROCK RIP-RAP INSTALLATION

EROSION CONTROL PLACEMENT NOTES

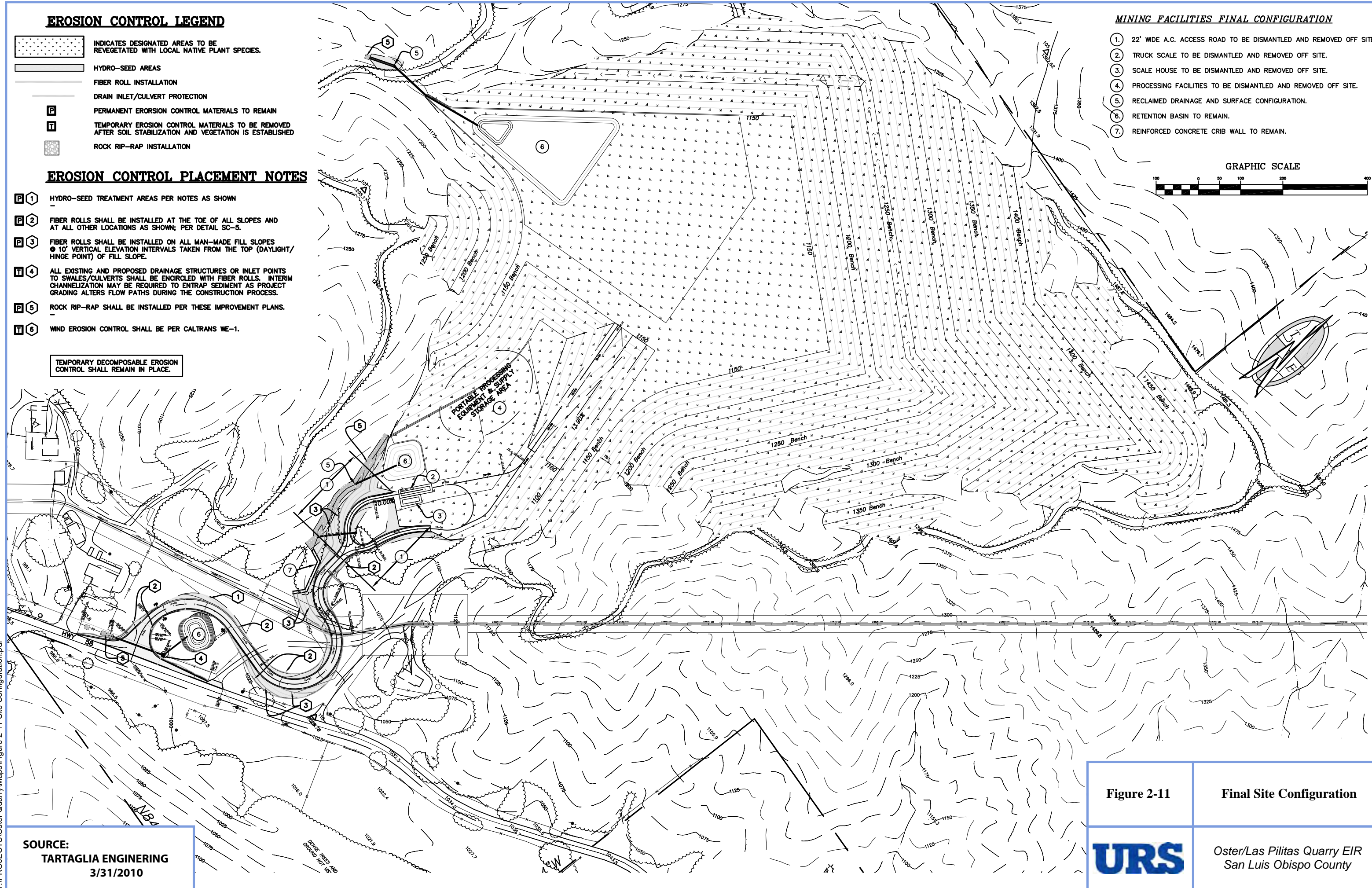
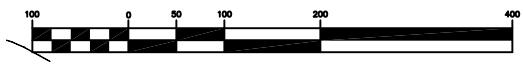
- P 1** HYDRO-SEED TREATMENT AREAS PER NOTES AS SHOWN
- P 2** FIBER ROLLS SHALL BE INSTALLED AT THE TOE OF ALL SLOPES AND AT ALL OTHER LOCATIONS AS SHOWN; PER DETAIL SC-5.
- P 3** FIBER ROLLS SHALL BE INSTALLED ON ALL MAN-MADE FILL SLOPES @ 10' VERTICAL ELEVATION INTERVALS TAKEN FROM THE TOP (DAYLIGHT/HINGE POINT) OF FILL SLOPE.
- T 4** ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES OR INLET POINTS TO SWALES/CULVERTS SHALL BE ENCIRCLED WITH FIBER ROLLS. INTERIM CHANNELIZATION MAY BE REQUIRED TO ENTRAP SEDIMENT AS PROJECT GRADING ALTERS FLOW PATHS DURING THE CONSTRUCTION PROCESS.
- P 5** ROCK RIP-RAP SHALL BE INSTALLED PER THESE IMPROVEMENT PLANS.
- T 6** WIND EROSION CONTROL SHALL BE PER CALTRANS WE-1.

TEMPORARY DECOMPOSABLE EROSION CONTROL SHALL REMAIN IN PLACE.

MINING FACILITIES FINAL CONFIGURATION


- 1. 22' WIDE A.C. ACCESS ROAD TO BE DISMANTLED AND REMOVED OFF SITE.
- 2. TRUCK SCALE TO BE DISMANTLED AND REMOVED OFF SITE.
- 3. SCALE HOUSE TO BE DISMANTLED AND REMOVED OFF SITE.
- 4. PROCESSING FACILITIES TO BE DISMANTLED AND REMOVED OFF SITE.
- 5. RECLAIMED DRAINAGE AND SURFACE CONFIGURATION.
- 6. RETENTION BASIN TO REMAIN.
- 7. REINFORCED CONCRETE CRIB WALL TO REMAIN.

GRAPHIC SCALE



T:\PROJECTS\Oster Quarry\Maps\Figure 2-11 Site Configuration.pdf

SOURCE:
TARTAGLIA ENGINEERING
3/31/2010

Figure 2-11	Final Site Configuration
	Oster/Las Pilitas Quarry EIR San Luis Obispo County

**SECTION 3.0
ENVIRONMENTAL SETTING**

The following paragraphs present a summary of the geographic setting of the property and discuss some of the applicable designations and policies from the County General Plan and Land Use Ordinance. The CEQA Guidelines (Section 15125(d), under “Environmental Setting,” state that an EIR shall discuss any inconsistencies between a project and any applicable plans. In this EIR, each of the topical sections in Chapter 4 includes a summary policy consistency analysis. Depending on the topic and specific issue, varying levels of discussion are provided in each section as appropriate. The related issue of land use compatibility is also discussed in some of the topical sections, and is addressed in more detail in Section 4.14 Land Use.

The following paragraphs present an overview of the land use designations on the property, followed by discussions of the regional setting that affect some of the specific issues discussed in this EIR (aesthetics and water supply).

3.1 LAND USE DESIGNATIONS

The property is within the County’s Las Pilitas Planning Area and is designated as Rural Lands (San Luis Obispo County, 2010). This land use designation is described in the area plan as “...generally large ownerships used for grazing, and watershed leading to Santa Margarita Lake and the Salinas River” (San Luis Obispo County, 2014: page 5-2). Various uses that may occur in this land use designation – and the permit requirements for each – are set forth in the San Luis Obispo County Land Use Ordinance in Section 22.06.20 and Table 2-2 of the Land Use Ordinance.

In Table 2-2 of the Land Use Ordinance, “Mines and quarries” are classified under the “Agriculture, Resource, and Open Space Uses,” and are listed as: “A2 Allowable Use, subject to land use permit required by the specific use standards.” The specific standards and procedures for mines and quarries are in Section 22.36 (Surface Mining and Reclamation). Section 22.36.040A requires a Conditional Use Permit (CUP) for all new surface mining operations. Other applicable Land Use Ordinance requirements are found in Sections 22.30.380 (dealing with recycling), 22.30.560 (storage yards), and 22.30.020(D) which allows exceptions to special use standards if approved via a CUP, such as that required for the proposed project.

The proposed quarry site within the subject property is also covered by the EX1 Extractive Resource Area Combining Designation in the Las Pilitas Planning Area Rural Combining Designation map (San Luis Obispo County, 2009). In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (Busch and Miller 2011:6). This state classification is

FINAL ENVIRONMENTAL IMPACT REPORT ENVIRONMENTAL SETTING

applied where adequate information is available indicating significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. The La Panza Granitics are referenced as “Sector C” by the California Geological Survey and cover 12,328 acres. In the Las Pilitas Planning Area, the EX1 Combining Designation occupies about 8,000 acres. This EX1 Combining Designation extends northward into the El Pomar-Estrella Planning Area and a little into the Salinas Planning Area to the west.

In summary, the proposed surface mine is consistent with the applicable General Plan and Land Use Ordinance designations, and the required CUP and Reclamation Plan provide the appropriate review mechanism for consideration of the project. The proposed quarry project may be inconsistent with several specific policies in applicable plans, and these are noted in the policy consistency analysis and discussions throughout Chapter 4. That chapter concludes with Section 4.14 Land Use, which addresses the issue of land use compatibility in the vicinity of the project site as well as within the community of Santa Margarita.

3.2 GEOGRAPHY AND SCENIC RESOURCES

The Las Pilitas Planning Area includes about 65,500 acres, and is central within the rural planning areas that occupy the mountainous land between the flatter Salinas River valley to the west and the Shandon-Carrizo Planning Area to the east. Figure 3-1 shows this pattern in the County planning areas, and the location of the project site within this larger region. The project site is near the western boundary of the Las Pilitas Planning Area, which at this location is formed by the Salinas River. The project vicinity is within a geographic transition that separates the flatter alluvial areas and lower hills to the west from the steeper hillsides to the east.

State Route 58 (SR 58), also called Calf Canyon Road in the project vicinity, connects US Highway 101 on the west through Bakersfield in the southern San Joaquin Valley to Barstow in the Mojave Desert on the east. No part of SR 58 is listed as an official Scenic Highway by Caltrans (2011), although a segment between Mojave and Barstow is considered “eligible” for such designation. The County General Plan Conservation and Open Space Element (COSE) lists SR 58 as a “Suggested Scenic Corridor” (San Luis Obispo County 2010: Table VR-2). The property containing the proposed quarry consists mainly of steep slopes (30-50 percent) covered in chaparral and scrub vegetation. Views of these types of slopes, as well as oak and pine woodlands and several major creek crossings, are part of the scenic environment associated with SR 58 leading to its inclusion in the COSE. The County has not prepared a corridor study or designated any land along SR 58 as a scenic resource area, as of the time the application for the project was submitted (April 2010).

The County has adopted highway corridor design standards for US Highway 101 in the region, and these are contained in the Areawide Standards for the Salinas River Plan (Section 22.104.020 H, found in Article 9 of the County Land Use Ordinance). Lands subject to these

FINAL ENVIRONMENTAL IMPACT REPORT ENVIRONMENTAL SETTING

standards, however, are all located within the Salinas River Area Plan, and do not extend into the Las Pilitas Area Plan or to the project site. The nearest lands subject to the Highway Corridor Design Standards are located about 2,500 feet northwest from the proposed quarry site (San Luis Obispo County 2008), and include low foothills visible from the west and portions of the existing Hanson Santa Margarita quarry. The design standards for this land visible within the US Highway 101 corridor apply only to "...residential structures, residential accessory buildings, residential access roads, specified agricultural accessory buildings and signs..." Other uses, such as the existing Hanson quarry and the proposed surface mine, are not subject specifically to the highway corridor design review process but are reviewed through the CUP or other regulatory procedures.

3.3 SURROUNDING LAND USES AND WATER SUPPLY

The Rural Lands designation is the largest land use category area within the Las Pilitas Planning Area – covering over 39,000 acres (San Luis Obispo County: 2003: Table C). Most areas surrounding the property containing the proposed quarry are also designated as Rural Lands, which, as noted above, are intended for large ownerships, grazing, and watershed uses. Besides the two existing residences within the subject property, there are two residences in the adjacent Rural Lands designation to the east and north of the property. Both of these sites are well removed from the proposed quarry location and are separated from it by intervening ridgelines.

Some adjacent properties to the south and southeast of the property are designated Residential Rural. This designation is placed on subdivided land southeast of SR 58 at the western edge of the planning area, and on subdivided lands along Parkhill Road. Within the first of these Rural Residential areas, there are about one dozen residences several of which are at locations with views into the proposed quarry site. There are several dozen residences in the second Rural Residential area along Parkhill Road to the southeast, but all of these are separated from the proposed quarry site by intervening ridges and greater distances.

These two Residential Rural areas are described in the Las Pilitas Area Plan (San Luis Obispo County: 2003: pages 5-2 and 5-3) as follows:

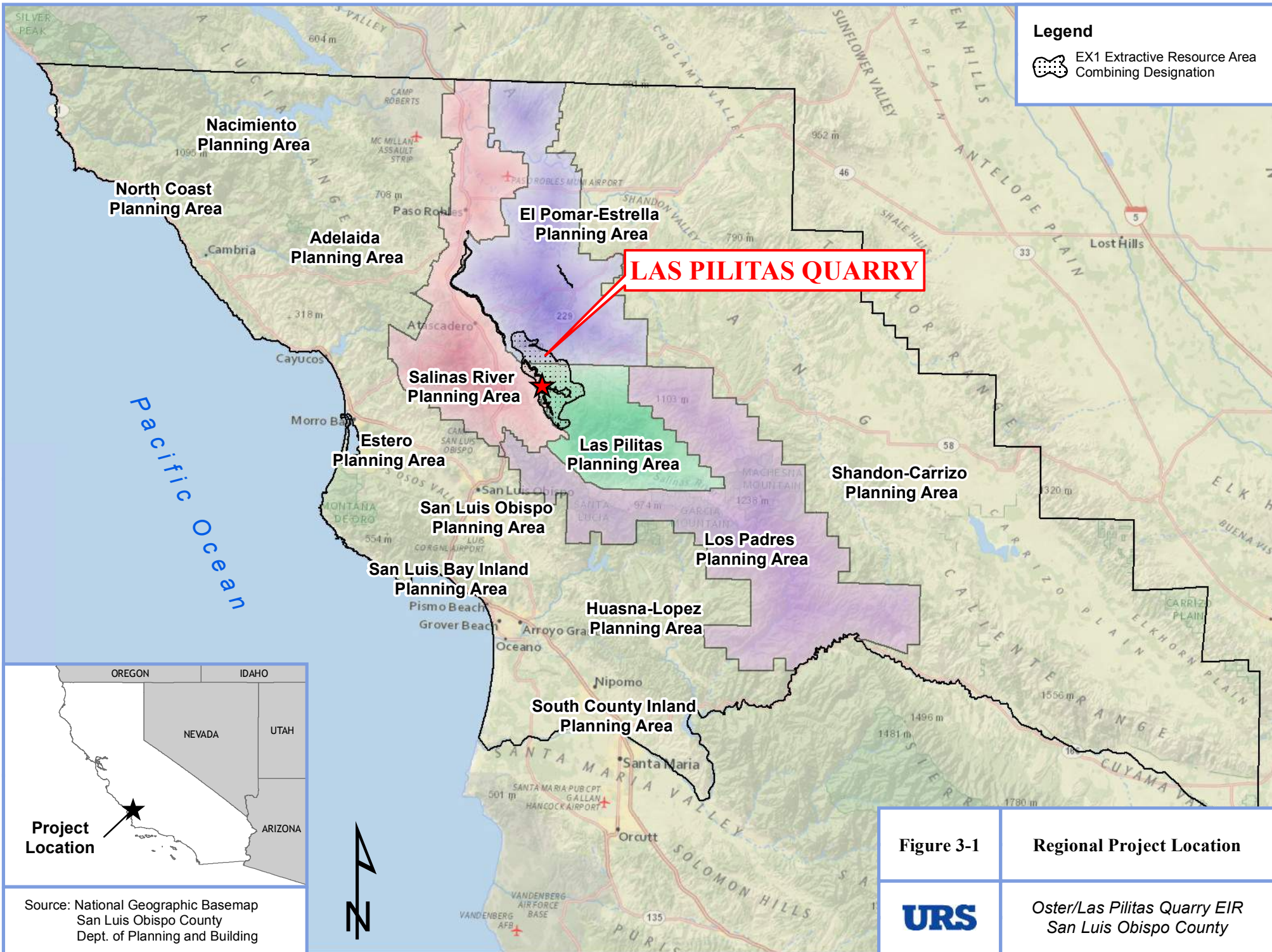
- The two areas designated as Residential Rural are not suited for commercial agriculture because of soil conditions, topography, small property size, broken ownership patterns and prior residential commitments. The area at the westerly edge of the planning area (south of the Oster/Las Pilitas Quarry subject property) primarily encompasses an existing group of lots that are about 10 acres in size. They have access from SR 58 and are located near Santa Margarita, Garden Farms and Atascadero for goods and services. Building single-family residences should be allowed on these parcels; however, this type of use should not be allowed to expand beyond the present locations.

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ENVIRONMENTAL SETTING



- The second area of rural residential uses, along Parkhill Road (southeast of the Oster/Las Pilitas Quarry property), has developed in recent years as properties have been divided. The area has limited water resources, and properties must rely on individual wells located in Moreno Creek and small local drainage ways. Rural residential use should be confined to existing lots in this area so as to not further over-burden an already limited water capability. These lands should not be developed with agricultural uses that will require intensive irrigation, thereby adversely impacting existing users in the area. Some existing residences appear to have been located in the creekbed, which subjects them to potential flooding. This practice should be corrected, especially since many of these properties have relatively flat areas adjacent to the road located out of the flood hazard area and off of the steep, brush-covered hillsides (where slopes often exceed 30 percent).

From the above descriptions, it appears unlikely that expansion of the Residential Rural designation or extensive residential subdivision will occur in the project vicinity. One of the constraints to extensive future development in the vicinity is the limited groundwater supply for most areas, particularly along Parkhill Road as described above. The Moreno Creek drainage basin along Parkhill Road includes about 3,200 acres of steep granitic hillsides and shallow alluvial material along the creek itself and its local tributaries. The Calf Canyon tributary to the Salinas River northwest of the Oster property ~~Moreno Creek~~ is similar, but with a smaller drainage area of about 2,100 acres. The subject property is at the confluence of Moreno Creek ~~these smaller drainages~~ with the much larger drainage of the Salinas River from the south. This unique location has a much larger groundwater resource than the nearby Residential Rural developed areas along Parkhill Road.

The water system within the 234-acre property includes permitted diversion points for surface and shallow subsurface water (wells), surface water ponds and water tanks for storage, and various pumps and pipelines. The total diversion amount for which permits have been issued by the California Department of Water Resources is about 94 acre-feet per year, or over 80,000 gallons per day. Actual water use on the property is less than this total, however, and has ranged from several hundred to several thousand gallons per day. The existing water supply serves two residences on the property and supports grazing and other minor agricultural uses on the property.



Legend

 EX1 Extractive Resource Area
 Combining Designation

LAS PILITAS QUARRY

Project Location

Figure 3-1

Regional Project Location

Source: National Geographic Basemap
 San Luis Obispo County
 Dept. of Planning and Building



*Oster/Las Pilitas Quarry EIR
 San Luis Obispo County*

4.1 AESTHETICS AND VISUAL RESOURCES

4.1.1 Existing Conditions

Project Site

The project site encompasses approximately 234 acres with the southern portion of the site located adjacent to SR 58 (also known as Calf Canyon Highway). The project site consists primarily of steep slopes (30 to 50 percent) covered in chaparral and scrub vegetation, with some oak trees. Views of these types of slopes, as well as oak and pine woodlands and several major creek crossings, are part of the scenic environment associated with SR 58 in the vicinity of the project site. There are several existing structures on-site that would be maintained with the proposed project including a barn, storage shed, shop/garage, a trailer and two residential structures. These structures are all located toward the southern boundary of the project site, off of SR 58. There are also existing ranching uses on the southern portion of the property.

The site is characterized by moderate to very steep terrain with one east-west trending drainage in the center, which is not visible from SR 58 or from nearby occupied properties. This central drainage is bounded by steep slopes and two ridgelines running generally east-west across the property. The southern portion of the site is relatively flat along SR 58. The project site is located in the La Panza Range, with the Salinas River and the Santa Lucia Range to the west. The valley bottom, at the southern end of the site, is formed from alluvium carried by Moreno Creek. This creek drains in a westerly direction to the southwest of the site towards the Salinas River.

Surrounding Land Uses

The land in and around the property consists of vacant steep hillsides (slopes typically over 50 percent) supporting natural vegetation, and flatter areas along drainages (slopes typically less than 10 percent) containing rural residences with grazing and similar ranch uses. Some adjacent properties to the south and southeast of the project site are designated Residential Rural. This designation is placed on subdivided land southeast of SR 58 at the western edge of the Las Pilitas planning area, and on subdivided lands along Parkhill Road. Within the first of these Rural Residential areas, there are about one dozen residences several of which are at locations with views into the proposed quarry site. There are several dozen residences in the second Rural Residential area along Parkhill Road to the southeast, but all of these are separated from the proposed quarry site by intervening ridges and greater distances. In addition, the Santa Margarita Quarry of Hanson Aggregates (Heidelberg Cement Co.) is located to the west and northwest of the property.

Figure 4.1-1 shows the Quarry Viewshed Analysis. This analysis is based solely on topography, and does not account for the effect of vegetation in obscuring views from some

FINAL EIR OSTER/LAS PILITAS QUARRY AESTHETICS AND VISUAL RESOURCES

locations. The figure illustrates the fact that travelers along SR 58 viewing in the eastbound direction will have a view into the proposed quarry along a segment of the highway approximately 4,100 to 2,200 feet southwest of its proposed location. As eastbound drivers approach closer to the project site, the elevation of SR 58 descends as the roadway approaches the Salinas River, and intervening topography blocks portions of the quarry site, particularly Phases 2A and 2B. As described in the preceding paragraph, there are also several homes in this area east of SR 58 from which the quarry would be partially visible. Figure 4.1-1 also shows the locations of the two key viewpoints that are discussed further in Sections 4.1.4 (Assessment Methodology) and 4.1.5 (Impacts and Mitigation), below.

Scenic Highways and Corridors

There are no officially designated State Scenic Highways within close proximity to the project site. State Route 58, also called Calf Canyon Road in the project vicinity, connects US Highway 101 on the west through Bakersfield in the southern San Joaquin Valley to Barstow in the Mojave Desert on the east. No part of SR 58 is listed as an official Scenic Highway by Caltrans (2011), although a segment between Mojave and Barstow is considered “eligible” for such designation.

The County General Plan Conservation and Open Space Element (COSE) identifies SR 58 as a “Suggested Scenic Corridor” (San Luis Obispo County 2010: Table VR-2). The County has not prepared a corridor study or designated any land along SR 58 as a scenic resource area, as of the time the application for the project was submitted (April 2010). Nevertheless, the County has identified SR 58 as a potential scenic corridor; Policy VR 4.3 in the COSE states: “The County should develop policies and standards for each designated scenic corridor that will guide all County and State road and highway development projects. An example of such policies and standards is included in Appendix 9.”

In general, the Assessment Methodology specified in Section 4.1.3 of this EIR and the Significance Criteria specified in Section 4.1.5 correspond to the policies and standards presented in Appendix 9.

The COSE (in Appendix 9), identifies “spectacular” visual resources as vistas of steep mountain ranges, the Pacific Ocean shoreline, and landmark volcanic peaks. The COSE also identifies more common features like rolling hills, open meadows, riparian corridors, and wetland areas, as scenic resources. The COSE describes scenic corridors as view areas or viewsheds from popular public roads and highways that have unique or outstanding scenic qualities. While the determination of “unique or outstanding scenic qualities” may be subjective, the steep hills covered with chaparral vegetation on the project site are a scenic resource even if they are not “spectacular.” The project site is also located in a geographic transition zone between the flatter rolling topography in the Santa Margarita area and the steeper areas to the east. The Salinas River supports a major riparian zone that adds scenic

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variety to the immediate vicinity of the proposed quarry site. SR 58 is also a route commonly travelled by people visiting the Carrizo Plain or other recreational destinations to the east, and these users of the highway may be more sensitive to changes in the visual resources along this corridor. These features help to describe the value of scenic resources along SR 58 and support the identification of the lands adjacent to SR 58 as a suggested scenic corridor by the COSE.

During review of the Notice of Preparation for this EIR, comments were received questioning the consistency of the project with the County Highway Corridor Design Standards related to views from US Highway 101. As explained in Section 3.2 of this EIR, all of the areas covered by these design standards are located within the Salinas River Area Plan, and none extend into the Las Pilitas Area Plan or onto the project site (San Luis Obispo County Code, Section 22.104.020 H, and Map Area 8).

4.1.2 San Luis Obispo County Plans and Policies

Several policies related to planning for visual resources are contained in the COSE. These are identified and paraphrased below in Table 4.1-1. Most of these policies deal with actions to be implemented during the development of Area Plans, and do not apply directly to the evaluation of individual projects. For policies that appear to be applicable, the information in Table 4.1-1 presents a preliminary determination with respect to the conformance of the project with the policy. The final determination regarding consistency of the project with County policies, however, is to be made by the Planning Commission or the Board of Supervisors if the project were to be appealed.

4.1.3 Regulatory Setting

The property is within the County's Las Pilitas Planning Area and is designated as Rural Lands (San Luis Obispo County 2010). All of the area proposed to be mined, and much of the remaining property, is covered by the EX1 Extractive Resource Area Combining Designation (San Luis Obispo County 2009), which is placed over a large portion of the Las Pilitas Planning Area. This Combining Designation recognizes the California Department of Conservation classification of the area as MRZ-2, which means that the State Geologist has identified these areas as containing significant deposits of aggregate material (San Luis Obispo County 2003:page 6-1). The project design and reclamation plan is intended to comply with the statute and regulations of the California Surface Mine and Reclamation Act (SMARA, found at 2 PRC 2710, and 14 CCR 3500) and with the County requirements found in Chapter 22.36 of the County Code. These codes require the stockpiling and reuse of topsoil and vegetative matter, stabilizing final slopes with benching and contouring, and the phased reclamation and revegetation as final slopes are reached.

In 1998, the County Board of Supervisors adopted "San Luis Obispo County Design Guidelines" with the stated purpose: "The Design Guidelines are intended to serve as an

**FINAL EIR OSTER/LAS PILITAS QUARRY
AESTHETICS AND VISUAL RESOURCES**

**TABLE 4.1-1
POLICY CONSISTENCY ANALYSIS – VISUAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
Conservation and Open Space Element/Policy VR 1.1	Adopt Scenic Protection Standards	Includes a series of actions recommended for the County to identify and designate scenic areas; amend plans and ordinances to provide scenic protection.	Not applicable to project-specific analysis
COSE/Policy VR 2.1	Develop in a manner compatible with Historical and Visual Resources	Encourage designs that are compatible with the natural landscape and with recognized historical character, and discourage designs that are clearly out of place within rural areas.	Potentially Consistent after the completion of reclamation and revegetation
COSE/Policy VR 2.2	Site Development and Landscaping Sensitive	Encourage designs that emphasize native vegetation and conform grading to existing natural forms.	Potentially Consistent after the completion of reclamation and revegetation
COSE/Policy VR 2.3	Revise Countywide Design Guidelines	New development should follow Countywide Design Guidelines to protect rural visual and historical character. This policy suggests that the County should revise the Countywide Design Guidelines.	Not applicable to project-specific analysis
COSE/Policy VR 3.1	Identify and Protect Community Separators	Identify Community Separators and propose land use strategies and development standards to maintain separate, identifiable cities and communities with intervening rural land.	Not applicable to project-specific analysis
COSE/Policy VR 3.2	Community Involvement	Encourage communities adjacent to Community Separators to maintain a sense of place and separation through education about the importance of separators.	Not applicable to project-specific analysis
COSE/Policy VR 3.3	Conservation Tools	Propose voluntary scenic, agricultural, or conservation easements and/or greenbelt programs that support private landownership while retaining the visual resources within Community Separators.	Not applicable to project-specific analysis
COSE/Policy VR 3.4	Community Edges	Maintain clear community edges for urban and village areas with appropriate plan designations when updating community and area plans.	Not applicable to project-specific analysis
COSE/Policy VR 3.5	Annexation in Community Separators	Avoid annexation of Community Separators or their inclusion in spheres of influence for sewer and water service.	Not applicable to project-specific analysis

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AESTHETICS AND VISUAL RESOURCES**

**TABLE 4.1-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – VISUAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
COSE/Policy VR 4.1	Designation of Scenic Corridors	Designate scenic corridors based on the recommendations for Scenic Corridor Studies, for the candidate roads and highways.	Not applicable to project-specific analysis
COSE/Policy VR 4.2	Balanced Protection	Balance the protection of scenic resources with the protection of biological and agricultural resources that may coexist within the scenic corridor.	Not applicable to project-specific analysis
COSE/Policy VR 4.3	Scenic Corridor Roadway Design	The County should develop policies and standards for each designated scenic corridor that will guide all County and State road and highway development projects.	Not applicable to project-specific analysis
COSE/Policy VR 5.1	Retain Existing Scenic Access	Encourage Caltrans to maintain existing scenic vista points.	Not applicable to project-specific analysis
COSE/Policy VR 5.2	Create New Scenic Access	Identify, construct, and maintain additional scenic overlooks, turnouts, or vista points along designated scenic corridors.	Not applicable to project-specific analysis
COSE/Policy VR 7.0	Nighttime Light Pollution	Exterior lighting, including streetlight projects, is designed to minimize nighttime light pollution.	Potentially Consistent
COSE Policy MN 3.3	Environmentally and Visually Sensitive Areas	Extraction operations may be established in designated environmentally or visually sensitive areas only when the Board of Supervisors determines that the need for a particular resource or facility outweighs the value of the sensitive land resource. Such sensitive resources may be subject to extraction operations only when no feasible alternative sites are available.	Potentially Consistent. Project vicinity is not designated an environmentally or visually sensitive area.

information resource for project designers and other interested people and is not intended to be a regulatory document. The guidelines encourage creativity and flexibility rather than a rigid "one-size-fits-all" approach." Part IV of these Guidelines – "Resource Conservation Guidelines" provides guidance "to preserve the natural appearance of ridgelines and other natural topographic features, and the ecological integrity of creeks, major vegetation features, and other habitats. Within Part IV, Resource Conservation Objective RC-7 states: "The impacts of grading should be minimized, both by limiting the amount of grading and by

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properly contouring areas where grading occurs. (*This Objective does not apply to surface mining operations.*)” (emphasis added). For the purpose of this EIR, it is assumed that Objective RC-7 excluded guidance for surface mining, because adequate guidance for grading was already provided by Chapter 22.36 of the County Land Use Ordinance and Chapter 8, Title 14, California Code of Regulations (SMARA).

Exterior lighting in all areas of the County is subject to the requirements of Section 22.10.060 of the County Code, which requires that lighting be directed downward and be shielded to minimize glare, and that no portion of lighting be directly visible from any residence within 1,000 feet.

4.1.4 Assessment Methodology

Analyzing aesthetics impacts involves an objective description of the aesthetic resources and visual features of the landscape, and then determining their importance to, and the sensitivity of, receptors that view them. The procedures used for the analysis in this EIR generally include the following steps:

1. Identifying sensitive visual resources/features and determining the relative importance of these views
2. Identifying and qualitatively evaluating the project-related changes in the aesthetic character of the site and surrounding area, based on the modification of the physical conditions and the viewer sensitivity
3. Analyzing policies to determine the project’s consistency with relevant local, state and/or federal land use policies
4. Determining light and glare impacts by comparing existing light sources with the proposed lighting, and designing the project to reduce the potential to generate spill light on adjacent sensitive receptors or to generate glare to receptors near the site

A review of relevant local land use planning documents was conducted to identify existing visual resources of community importance and to identify relevant land use regulations and policies related to these resources. Visual resources are scenic areas that are important aspects of the quality of life for residents and visitors. These resources include documented features of visual importance. For the purpose of this EIR analysis a scenic vista is an officially designated or recognized public view from a given location or corridor as identified in land use documents. The suggested scenic corridor of SR 58, as described in Section 4.1.1 above is one such visual resource.

The evaluation of project impacts was based on proposed project conditions in comparison to the existing conditions. Several visits were conducted to assess the existing visual character and quality of the project area and to take photographs. Based on site visits and considering

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the extent of visibility from distant points, the analysis was oriented towards views in the relative vicinity of the project site—within a distance of about one mile. This is because at greater distances, the project site comprises such a small fraction of the overall view that any changes on it would not substantially alter the overall view.

For areas within one mile of the project site, photographs were taken from public viewpoints within the project vicinity. From these, two “key viewpoints” were selected for visual simulation based on the predominance of public view and proximity to the project site. Visual simulations are intended to help evaluate the project’s potential visual impact within the context of the existing setting. Visual simulations provide a tool for identifying existing and proposed visual conditions. As part of the visual simulation process, a photograph is taken of the existing conditions at key viewpoints and then a visual representation of the proposed project is generated from the same vantage point. The visual simulations for the proposed project included Phase 1B excavation, completion of Phase 3B excavation and completion of reclamation and revegetation, after approximately 10 years of plant growth.

The primary visual resource considered in this analysis is the SR 58 corridor, and the associated views of steep hillsides covered with natural chaparral vegetation that contribute to the identification of this area as a suggested scenic corridor in the COSE.

Several residences are located in the project vicinity from which views into the property will be affected. The County does not have any specific policies to protect views from private lands, but alterations to any views would be of concern to residents. Residents are a viewer group highly sensitive to visual change. They have a greater awareness and more continuous exposure to the landscape in which they live, and typically expect that the existing visual character of their area will be maintained. Most residences with views into the quarry project site are located along SR 58 south and west of the project site. Several isolated residences in the higher elevations south of the site also have views into the proposed quarry. None of the residences along Parkhill Road or at lower elevations to the east of the property would be able to see the quarry. This is by design, since the mining plan would preserve two ridgelines on the east and west side of the quarry entrance, as well as oak trees and other vegetation near the entrance, specifically to help block views into the quarry from residences and from travelers along SR 58.

A second area or corridor from which views may be considered important is the Salinas River. The County Parks and Recreation Department long range plans include the development of a recreational trail generally along the Salinas River (San Luis Obispo County Parks and Recreation Element of the General Plan 2006:page 65 and Map H). Future recreational users of this trail would also be considered sensitive viewers.

Visual Simulations

A viewshed analysis identifying areas of visibility is provided as Figure 4.1-1, Quarry Viewshed Analysis. As noted in Section 4.1.1 above, this analysis is based solely on topography, and does not account for the effect of vegetation in obscuring views from some locations. In particular, the riparian corridor along the Salinas River provides a tall and dense vegetative wall that blocks views from the river and adjacent areas to the southwest. The viewshed analysis was limited to a radius of about one mile because field visits and preliminary simulations showed that at greater distances the project size was simply too small to have a major influence on the larger visual backdrop of the adjacent hillsides. In general, views of the quarry operations would be more dominant from viewpoints located in close proximity to the project site than for viewers located at further distance. Taking this into account, two “key viewpoints” were selected for visual simulation and analysis based on the dominance of public view and proximity to the project site.

The first of these was “View 1” (as identified in Figure 4.1-1). This site was selected for visual simulation since both residents and travelers in this area would have views of the proposed quarry. This view represents the greatest effect of the proposed quarry on the greatest number of people. The picture was taken approximately 600 feet southwest of Digger Pine Road, looking northeast on SR 58. The proposed quarry site is at center on the skyline ridge. The view from this location is represented in a series of four photographs with visual simulations of the project:

- Figure 4.1-2A depicts the existing conditions looking north towards the project site from SR 58. Visible within View 1, are existing landscaping (trees to the left of SR 58), power lines, residential structures and the natural hillsides. The dominant visual feature is the hillside terrain.
- Figure 4.1-2B depicts the Completion of the Phase 1B excavation. The hillside is graded at lower elevations and is visible from the roadway. The graded portion of the hillside provides a sharp contrast in comparison to the undistributed area creating visual incompatibility.
- Figure 4.1-2C depicts completion of Phase 3B excavation without vegetation on the later slopes and with partial regrowth on the slopes vegetated in earlier phases of the reclamation. The westerly ridge of the quarry helps to shield views into the larger graded area from this vantage point, and the reclaimed slopes from earlier phases also help to reduce the contrast between freshly exposed rock surfaces and the natural vegetation. The cut and graded slopes, nevertheless, remain visually incongruent with the primarily naturally vegetated slopes along SR 58.
- Figure 4.1-2D depicts completion of reclamation and vegetation with a few years of plant growth. While disturbed areas are still visible, the restored project site is starting to blend into the naturally vegetated landscaped hillsides.

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The second viewpoint selected for analysis was View 2, a location along SR 58 very near the project access point and the proposed quarry itself:

- Figure 4.1-3A depicts the existing conditions looking toward the project site from SR 58, just east of the Salinas River bridge. A pasture adjacent to SR 58 and rolling hills with vegetated terrain are the dominant visual features from this viewpoint. Other visual features include the wooden arch entryway to the property owner's residential compound, and a second residence on the property with its driveway near the left side of the photograph. In general, the site has a rural residential character.
- Figure 4.1-3B depicts the completion of the Phase 1B excavation. The new access road and a portion of the graded hillside are visible from the roadway from this vantage point, which represents views from eastbound SR 58. Oak trees in the mid-ground portion of the view and the preserved ridgelines partially block the views into the quarry, but the visible graded slope would stand in contrast to the adjacent brush covered hillside. Travelers going west on SR 58 would not have the same direct view, or would have to turn and look over their shoulders to see this view.
- Figure 4.1-3C depicts completion of Phase 3B excavation without vegetation. By this point, the quarry operation would remove a portion of the slope that was visible in the previous simulation, and a more distant fresh slope would be visible. More extensive grading associated with this phase is shielded from view by the westerly and easterly ridgelines preserved within the quarry (left and right side of the photograph). This vantage point is typical for viewers who would be eastbound on SR 58. While not as dominant as in other views, the graded portion of the hillside still breaks the visual continuity in the area and contrasts with the natural vegetation.
- Figure 4.1-3D depicts completion of reclamation and vegetation with approximately 10 years of plant growth. The restored project site blends into the rural setting with the naturally landscaped hillsides being the dominant view.

4.1.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Aesthetics and Visual resources within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Create an aesthetically incompatible site open to public view; and/or
- b. Introduce a use within a scenic view open to public view; and/or
- c. Change the visual character of an area; and/or
- d. Create glare or night lighting, which may affect surrounding areas; and/or

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e. Impact unique geological or physical features.

4.1.6 Project Impacts and Mitigation Measures

Effects on Scenic Vistas (SR 58)

As a fully functional quarry operation, this project will change the visual character of the surrounding area, due to ongoing grading for more than 25 years. Further, even upon cessation of the mining operations and phased implementation of the Reclamation Plan, the revegetated slopes will not appear “natural” when viewed by travelers and the public along Highway 58.

The project will affect general visual resources in the area and the scenic vista observed from SR 58. Minor improvements necessary to connect the existing well near the river to the pipes and tanks that will supply the project will occur within existing ranch roads on the property and will not substantially alter the visual conditions from their existing conditions. It is anticipated that proposed Tank “A”, as shown on Figure 2-3, will be visible from Highway 58; proposed Tank “B” will not be visible.

Although this is not an officially designated scenic highway, Policy VR 4.1 of the COSE indicates that SR 58 will eventually become a scenic corridor. Based on the above descriptions the project is expected to have a significant impact on views from eastbound traffic along the SR 58 corridor, and similar effects on views from a few residents located south of the project site. The visual effects of the project can be reduced, but not avoided until after maturity of revegetation in the reclamation plan, which cannot occur for several decades. Given the large cut slopes associated with the mining activities and the sensitivity of views in the area, including the status of SR 58 as a “candidate” scenic highway corridor in the COSE, the visual effect of the project on the scenic vista is considered a significant impact that can be mitigated, but not to a level below significance.

Description of Impact	Mitigation Measures	Residual Impact
<p>IMPACT AES-1: Scenic Vistas. The project will create graded slopes into natural hillsides, which will be visible to the public from portions of the SR 58 corridor, which is identified for study as a scenic corridor by the Conservation and Open Space Element. These slopes may adversely affect the aesthetic character of</p>	<p>MM AES-1a: Scenic Vistas/Reclamation and Revegetation. Revegetation of all final slopes and flat portions of the completed mine shall be accomplished in accordance with the approved Surface Mine Reclamation Plan. This includes phased reclamation in which exposed slopes in Phases 1B, 2A, 2B, and 3A are revegetated as early as practical, concurrent with the start of quarrying in the next subsequent phase. Upon completion of all quarry activities, all equipment and the access road are to be removed, and lower slopes within the quarry shall be filled to a slope of no more than 2:1 and revegetated consistent with the Final Site Configuration Plan shown in Appendix B and consistent with the performance standards for revegetation in the state surface mining regulations (14 CCR 3705). In accordance with Sections 22.01.050 (D) (4) and 22.01.070 of the County Land Use</p>	<p>Significant and not mitigated</p>

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Description of Impact	Mitigation Measures	Residual Impact
<p>the site and the surrounding area. The location of Tank "A" will be visible from public views and has the potential to silhouette against the skyline as viewed from SR 58.</p>	<p>Ordinance, all revegetated areas shall be permanently maintained in perpetuity. The applicant/quarry operator shall provide a financial guarantee to ensure completion of the reclamation plan, including monitoring and maintenance to demonstrate that vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of the final assurance.</p> <p>MM AES-1b: Scenic Vistas/Off-site Landscaping Agreement. Prior to the issuance of any construction permit for project construction activities, the applicant/quarry operator shall obtain agreement from the off-site property owner (APN 070-154-018 / 6795 Calf Canyon Highway) for installation and maintenance for the life of the project, of additional landscaping as described below in mitigation measure AES-1c. The off-site landscaping shall be shown in a preliminary landscaping plan included within the grading plans for construction of the project access road and other initial improvements <u>as described in MM AES-1c with the intent of screening views of the quarry from eastbound travelers on SR 58.</u></p> <p>MM AES-1c: Scenic Vistas/Off-site Landscaping. Prior to the start of excavations in Phase 1A, off-site landscaping shall be installed at a location approved by the Planning and Building Department (approximately 1,500 feet southwest of the project entrance and 100 feet southeast of the SR 58 roadway edge). The landscaping shall consist of 2 to 4 conifers or other tall growing trees consistent with the existing trees at this location, and shall be planted at a location that will help to block views into the quarry site from eastbound traffic on SR 58 and maintained for the life of the project.</p> <p>MM AES-1d: Scenic Vistas/Screening of Water Tank. Prior to the issuance of any construction permit for project construction activities, the applicant/quarry operator shall show landscape screening in a preliminary landscape plan. Landscaping shall be installed and maintained for the life of the project to visually screen Tank "A" from public views along SR 58. <u>The applicant shall provide evidence that the proposed tank(s) are as low profile as is possible, given the site conditions and tank(s) shall be a neutral or dark, non-contrasting color.</u></p>	

Effects on Scenic Vistas (Salinas River Trail)

Recreational users would also be sensitive to visual change. The Salinas River Trail and Natural Area proposed trail corridor crosses generally through the south-west corner of the project site based on the County Trails Map in the Parks and Recreation Element of the General Plan (San Luis Obispo County 2006:Chapter 8, Table 5(b), page 65 and Map H). There is no trail plan, proposed alignment, right-of-way, or any location information beyond the broad corridor shown generally along the river itself. There is no existing trail or trail right-of-way on adjacent parcels upstream or downstream from the subject property. Assuming that any future trail is generally located along the river corridor itself, and not

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along ridgelines in the general vicinity, the proposed quarry is not expected to have any significant visual effect on trail users. This is because the nearest point within the proposed quarry is over 1,000 feet from the Salinas River. The preserved western ridge in the quarry, along with the extensive riparian vegetation and oak trees along the river corridor, will block all views from the vicinity of the river into the proposed quarry. Minor improvements necessary to connect the existing well near the river to the pipes and tanks that will supply the project will occur within existing ranch roads on the property and will not substantially alter the visual conditions from their existing conditions. It is anticipated that proposed Tank “A”, as shown on Figure 2-3, will be visible from Highway 58; proposed Tank “B” will not be visible. The effects of the project on views from the future Salinas River trail corridor will be less than significant.

Description of Impact	Mitigation Measures	Residual Impact
IMPACT AES-2: Scenic Vistas/Salinas River Trail. Although the project will create graded slopes into natural hillsides in the general vicinity of the proposed Salinas River trail corridor, those views will be blocked by existing vegetation and intervening topography.	MM AES-2: Scenic Vistas/Salinas River Trail. Since this effect is less than significant, no mitigation is required.	Less than significant

Effects on Nighttime Glare

The proposed project would create a new source of nighttime light in the vicinity, which may affect views in the area. Sources of light include the existing residential and ranch structures on-site that would be maintained with the proposed project. These include two residences, a barn, storage shed, shop/garage, and trailer. Lighting typically associated with these types of uses includes entryway light, interior building lighting, architectural and landscape lighting. These sources of light are part of the existing conditions, and are similar to those within the vicinity of the project site. The proposed quarry would not operate at night and new sources of light are anticipated to be limited to that which is needed for safety and security at the scale house and in the processing area where quarry vehicles and equipment would be stored. The nearest existing residences are both within the subject property, at distances of 380 and 800 feet from the scale house location. The nearest off-site residences are in excess of 1,200 feet south and southwest from the scale house location. Minor security lighting may also be provided at gates or other features on the access road for the project.

New light sources would be required to comply with the existing County standards for outdoor lighting (San Luis Obispo County Code, Section 22.10.060). In summary, these standards include:

- Outdoor lighting is to be used for illumination only.

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- Light sources shall be designed and adjusted to direct light away from any road or street, and any dwelling outside the ownership of the applicant.
- No light or glare shall be transmitted or reflected in such concentration or intensity as to be detrimental or harmful to persons, or to interfere with the surrounding properties or streets.
- Light sources are to be shielded – with any light intended for ground illumination from a height greater than eight feet required to have shielding that extends below the lower edge of the light source to block the view of the light source from the view of any residential use within 1,000 feet of the light fixture.
- Freestanding outdoor light fixtures are not to exceed the height of the tallest building on the site.
- Street lighting shall be designed to minimize light pollution by preventing the light from going beyond the horizontal plane at which the fixture is directed.

Depending on the final location and design of lighting for the project, it may be visible from residences on and off of the subject property. Thus, nighttime lighting represents a potentially significant impact, which can be mitigated through design and compliance with applicable County standards.

Description of Impact	Mitigation Measures	Residual Impact
<p>IMPACT AES-3: Nighttime Glare. The project will create a new source of nighttime lighting in the vicinity, which may generate glare visible to residences on properties to the south or southwest.</p>	<p>MM AES-3: Nighttime Glare/Lighting Plan. Prior to the issuance of a building permit for the project scale house, the applicant/quarry operator shall provide a plan or specifications for <u>all lighting (including security lighting)</u> that complies with the County Land Use Ordinance for approval by the County Planning and Building Department. <u>All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from SR 58.</u></p>	<p>Less than significant</p>

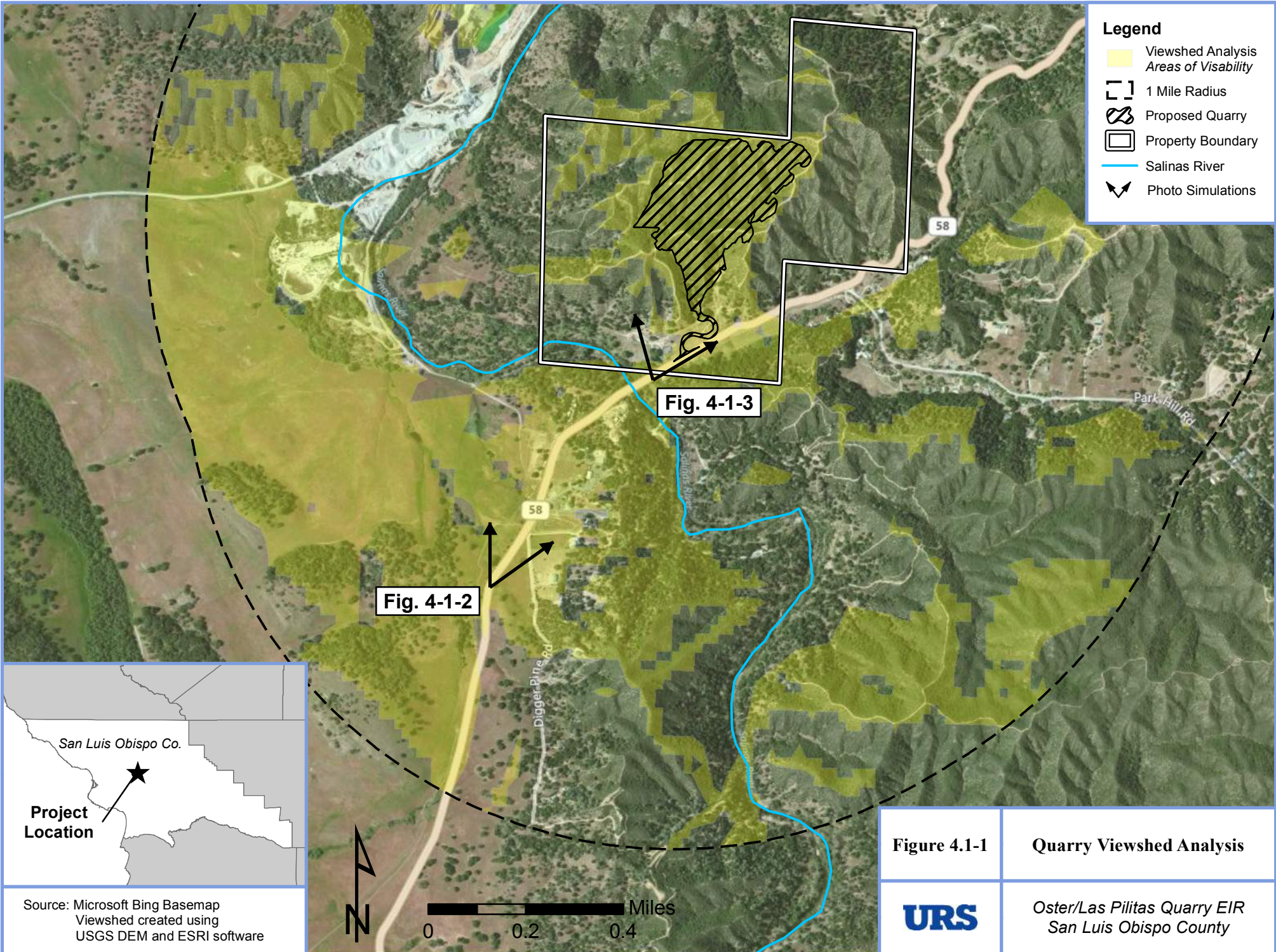
Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries could be approved and constructed in this area, and that an unspecified number of them will have graded areas and ultimately revegetated slopes that will have visual impacts similar to this proposed project, particularly when viewed from Highway 58. Although the specific number, location, and actual

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configuration of these future quarries is unknown at this time, cumulative effects relative to Aesthetics and Visual Resources are expected to be significant and not mitigable due to the nature of mining activities and the engineered appearance of mined slopes in quarry operations.

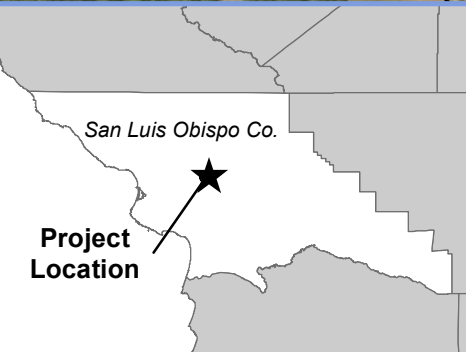
Description of Impact	Mitigation Measures	Residual Impact
<p>IMPACT AES-4: Cumulative Effects on Aesthetics and Visual Resources. It is reasonable to expect that future quarries will be approved and constructed in the area surrounding the project. An unspecified number of these future quarries will have graded areas and ultimately revegetated slopes that will have adverse visual impacts similar to the proposed project, particularly when viewed from Highway 58. However, the specific number and actual configuration of these future quarries is unknown at this time.</p>	<p>MM AES-4: Cumulative Effects on Aesthetics and Visual Resources. Mitigation measures similar to AES-1a, AES-1b, AES-1c and AES-1d are likely to be applied to any future quarries. These measures may serve to minimize impacts on views from SR 58, but they are not likely to eliminate impacts entirely.</p>	<p>Significant and not mitigated</p>



- Legend**
- Viewshed Analysis Areas of Visibility
 - 1 Mile Radius
 - Proposed Quarry
 - Property Boundary
 - Salinas River
 - Photo Simulations

Fig. 4-1-2

Fig. 4-1-3



Source: Microsoft Bing Basemap
Viewshed created using
USGS DEM and ESRI software

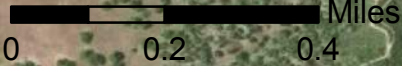


Figure 4.1-1	Quarry Viewshed Analysis
URS	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>



Figure 4.1-2a

Existing Conditions



*Oster/Las Pilitas Quarry EIR
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Figure 4.1-2b	Proposed Phase 1B
URS	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>



Figure 4.1-2c	Proposed Phase 3B
URS	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>



Figure 4.1-2d

**Proposed Phase 3B
with Partial Revegetation**



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San Luis Obispo County*



Figure 4.1-3a

Existing Conditions



*Oster/Las Pilitas Quarry EIR
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Figure 4.1-3b

Proposed Phase 1B



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*



Figure 4.1-3c

Proposed Phase 3B



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*



Figure 4.1-3d

**Proposed Phase 3B
with Partial Revegetation**



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*

4.2 AGRICULTURAL RESOURCES

4.2.1 Existing Conditions

The proposed quarry is located on an approximately 234-acre parcel owned by the Oster family. Of this, the quarry and access road will occupy approximately 41 acres of the parcel. The entire property is located in the Las Pilitas Planning Area and is within the EX1-Extractive Resource Area Combining Designation.

Past agricultural use on the property was mostly grazing, with some limited cultivation. Based on a review of statements of water diversion filed with the State Water Resources Control Board, this past use has included up to 30 to 40 head of cattle; two acres of corn; and a small orchard and garden near the house. A review of aerial photos over the last 20 years was generally consistent with these uses. There is no evidence of extensive irrigated agriculture on the property.

The surrounding vicinity does not have intensive agriculture use. There is a vineyard on Santa Margarita Ranch occupying about 400 acres three miles to the southwest of the subject property. Based on aerial photo review, there are also two to three small orchards, about one to two acres, each on Parkhill Road one mile east from the property. There is grazing land within and in close proximity to the property.

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) rates soils and their productivity by two measures, the Land Capability Classification (LCC) system (NSSH Part 622.02) and Farmland Classification (NSSH Part 622.03).

The land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. Soils are defined by the classes which are used to represent both irrigated and non-irrigated land capability classes, as described in Table 4.2-1 below.

The NRCS Farmland Classification identifies map units as prime farmland, farmland of statewide importance, or farmland of local importance. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium, and few or no rocks. Its soils are permeable to water and air. Prime farmland is not excessively erodible or saturated with

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**TABLE 4.2-1
NRCS LAND CAPABILITY CLASSES AND SUBCLASSES**

Land Capability Class	Description
Class I (1)	Soils have slight limitations that restrict their use.
Class II (2)	Soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.
Class III (3)	Soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.
Class IV (4)	Soils have very severe limitations that restrict the choice of plants or require very careful management, or both.
Class V (5)	Soils have little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
Class VI (6)	Soils have severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
Class VII (7)	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.
Class VIII (8)	Soils and miscellaneous areas have limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or water supply or for esthetic purposes.
Land Capability Subclass	Description
Subclass "e"	Soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.
Subclass "w"	Soils for which excess water is the dominant hazard or limitation affecting their use. Poor soil drainage, wetness, a high water table, and overflow are the factors that affect soils in this subclass.
Subclass "s"	Soils that have soil limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.
Subclass "c"	Soils for which the climate (the temperature or lack of moisture) is the major hazard or limitation affecting their use.

water for long periods of time, and it either does not flood frequently during the growing season or is protected from flooding. Other criteria are also considered.

The California Revised Storie Index Rating, which is derived from NRCS soil map units, is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture. For simplification, Storie Index ratings have been combined into six grade classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10 (USDA 2008). These ratings are primarily used in California to define lands eligible for Williamson Act designation as "prime agricultural land."

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The Williamson Act (California Land Conservation Act of 1965) was designed as an incentive to retain prime agricultural land and open-space in agricultural use, thereby slowing its conversion to urban and suburban development.

Under the Williamson Act, soils must meet any of the following criteria to be considered “prime agricultural land” (CA Government Code Section 51201(c)):

1. *All land that qualifies for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications.*
2. *Land which qualifies for rating 80 through 100 in the Storie Index Rating.*
3. *Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.*
4. *Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.*
5. *Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars (\$200) per acre for three of the previous five years.*

The subject property is not in any areas mapped as Williamson Act preserve in San Luis Obispo County (DOC 2009).

For the state of California, the Department of Conservation also uses the Farmland Mapping and Monitoring Program (FMMP) to categorize important agricultural lands. The FMMP produces maps and statistical data used for analyzing changes in on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. In order to be shown on FMMP’s Important Farmland Maps as Prime Farmland and Farmland of Statewide Importance, land must meet both the following criteria:

Has been used for irrigated agricultural production at some time during the four years prior to the Important Farmland Map date. Irrigated land use is determined by FMMP staff by analyzing current aerial photos, local comment letters, and related GIS data, supplemented with field verification.

— AND —

Soil:

The soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA Natural Resources Conservation Service (NRCS). NRCS compiles lists of which soils in each survey area meet the quality criteria. Factors considered in qualification of a soil by NRCS include:

- *Water moisture regimes, available water capacity, and developed irrigation water supply*
- *Soil temperature range*
- *Acid-alkali balance*
- *Water table*
- *Soil sodium content*
- *Flooding (uncontrolled runoff from natural precipitation)*
- *Erodibility*
- *Permeability rate*
- *Rock fragment content*
- *Soil rooting depth*

The FMMP defines nine categories of land (or water) that may potentially be located on the project site, and these are listed in Table 4.2-2. Most of the property is considered Other Land in the FMMP mapping as shown in Figure 4.2-2. Several areas in the southern portion of the Oster property are mapped as Grazing Land, and a small corridor of Metz sandy loam, 0–5 percent slopes, just north of the Salinas River is mapped as Farmland of Local Potential in the FMMP system.

The County defines Important Agricultural Soils in the Conservation and Open Space Element of the General Plan (San Luis Obispo County COSE 2010: Table SL-2). Important soils are defined in the COSE using NRCS description and map units. The descriptions of the map units for these important soils are summarized in Table 4.2-3 below.

Table 4.2-4 summarizes the soil classifications and ratings of the soils that use NRCS map units that are located within the property.

4.2.2 San Luis Obispo County Plans and Policies

Table 4.2-5 identifies San Luis Obispo County agricultural plans and policies applicable to the property.

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**TABLE 4.2-2
FARMLAND MAPPING AND MONITORING PROGRAM LAND CATEGORIES**

Category	Description
Prime Farmland	Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Farmland of Statewide Importance	Farmland of Statewide Importance is similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Unique Farmland	Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
Farmland of Local Importance	Areas of soils that meet all the characteristics of prime or statewide, with the exception of irrigation. Additional farmlands include dryland field crops of wheat, barley, oats, and safflower.
Farmland of Local Potential	Lands having the potential for farmland, which have prime or statewide characteristics and are not cultivated.
Grazing Land	Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.
Urban and Built-up Land	Urban and Built-up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.
Other Land	Other Land is land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as other land.
Water	Perennial water bodies with an extent of at least 40 acres.

4.2.3 Regulatory Setting

Approval of the CUP and Reclamation Plan for the project must include a finding that the proposed use is not detrimental or injurious to property or improvements in the vicinity of the use (among other findings required by Title 22, Section 22.62.C.4). This finding must apply to agricultural as well as residential uses in the vicinity. Additionally, the project must be found in compliance with applicable plans and policies contained in Table 4.2-5 (i.e., applicable General Plan Policies).

The Air Pollution Control District of San Luis Obispo County can protect adverse effects to agriculture under Rule 402, Nuisance (Adopted 8/2/76), which states:

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**TABLE 4.2-3
DESCRIPTIONS OF COSE IMPORTANT AGRICULTURAL SOILS**

Category	Description
Prime Farmland	Using both federal and state definitions of land that are considered “prime” lands for farming. The United States Department of Agriculture (USDA) Natural Resource Conservation Services (NRCS) has defined these lands as “Prime Farmland” in the Code of Federal Regulations for Agriculture. The State of California also defines lands that are “prime” for farming as “Prime Agricultural Land” in the (Williamson Act) and the California Coastal Act of 1976. The State’s definition of prime agricultural land is based on relevant land capability classifications and the California Revised Storie Index, whether or not land is actually irrigated. The “Prime Farmland” in this Element is based on both federal and state definitions.
Farmland of Statewide Importance	These soils are defined by the USDA NRCS in the Code of Federal Regulations for Agriculture. Farmland of Statewide Importance designation is based on soil physical and chemical criteria, whether or not land is actually irrigated. Farmland of Statewide Importance is identified and mapped as per the Web Soil Survey
Other Productive Soils	Unique Farmland, as defined by the USDA NRCS in the Code of Federal Regulations for Agriculture, have a soil slope of 30 percent or less (except Paso Soil 198, 15 to 50 percent slope), and meets at least two of the following three criteria: 1) California Revised Storie Index is fair, good or excellent; 2) Irrigated Capability Class is one through six; 3) More than 3 percent of the soil type is in irrigated/permanent crop use as of 2008. Criteria 1 and 2 are based upon information from the Web Soil Survey. Criterion 3 is based upon GIS cropland mapping by the San Luis Obispo County Agriculture Department.
Highly Productive Rangeland Soils	These soils meet all of the following criteria as identified on the Web Soil Survey: 1) Produces forage that is equivalent to 60 percent or more of the maximum normal year forage production for that soil survey area; 2) Majority of the forage produced is herbaceous; 3) Slope is less than 30 percent (except soil types Coastal 133 and 168 and Carrizo 130, each 15 to 50 percent slope).

A. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

B. The provisions of Rule 402.A shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Since air contaminants such as fugitive dust could cause damage to plants, this rule would apply to the project due to the potential risk of “damage to business or property.”

**TABLE 4.2-4
SUMMARY OF SOIL TYPES AND CHARACTERISTICS FOR THE SUBJECT PROPERTY**

Soil Series Name	Map Unit No.	Acres In Property	Acres In Proposed Quarry	Land Capability Class*	California Revised Storie Index	Farmland Classification NRCS	FMMP Category	COSE Designations
Cieneba coarse sandy loam, 30 to 75 percent slopes	126	107	34	7e/7e	9 (Non-agricultural)	Not Prime Farmland	Other	None
Cieneba-Andregg complex, 30 to 75 percent slopes	127	110	6	7e/7e	12- 19 (Very Poor)	Not Prime Farmland	Other Land (99.75 ac) Grazing Land (10.25 ac)	None
Metz loamy sand, 0 to 5 percent slopes	166	17	<1 (plus 2.1, access road)	4s/3s	64 (Good)	Farmland of Statewide Importance	Other Land (14 ac) Farmland of Local Potential (3 ac)	Farmland of Statewide Importance
Xerofluvents-Riverwash association	212	22	0	6w/6w and 8w/8w	Not Rated	Not Prime Farmland	Grazing Land	None

* Non-Irrigated/Irrigated

TABLE 4.2-5
SAN LUIS OBISPO COUNTY AGRICULTURAL PLANS AND POLICIES

Source	Policy Statement	Discussion	Preliminary Determination
Conservation and Open Space Element/ Policy SL 1.1	Prevent Loss of Topsoil in All Land Uses: Minimize the loss of topsoil by...cooperation between property owners, agricultural operators, agencies, and organizations that will lead to effective soil conservation practices on all lands.	The thin layer of topsoil over the proposed quarry site will be preserved for later restoration.	Potentially consistent
COSE/Policy SL 1.2	Promote Soil Conservation Practices in all Land Uses: Require erosion and sediment control practices during development or other soil-disturbing activities on steep slopes and ridgelines. Requires restoration and re-vegetation of disturbed areas.	Best management practices will be used to minimize the effects of erosion. The thin layer of topsoil over the proposed quarry site will be preserved for later restoration.	Potentially consistent
COSE/Policy SL 3.1	Conserve Important Agricultural Soils: Conserve the Important Agricultural Soils mapped and listed by the COSE. Coordinate with Resource Conservation Districts and local agencies to determine potential impacts and subsequent mitigation measures.	The only listed soil within the proposed quarry site is Metz loamy sand which is considered a Farmland of Statewide Importance. This soil is only present at a portion of the entry way to the quarry, most of which has already been developed on.	Potentially consistent
COSE/Policy WR 1.7	Agricultural operations: Groundwater management strategies will give priority to agricultural operations. Protect agricultural water supplies from competition by incompatible development through land use controls.	The project will not significantly reduce the amount or quality of water for production agriculture as there are no water intensive agriculture uses in the immediate vicinity of the proposed project site.	Potentially consistent
Agriculture Element/ AGP 11	Agricultural Water Supplies: Maintain water resources for production agriculture in both quantity and quality.	The project will not significantly reduce the amount or quality of water for production agriculture as there are no water intensive agriculture uses in the immediate vicinity of the proposed project site.	Potentially consistent

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**TABLE 4.2-5 (CONTINUED)
SAN LUIS OBISPO COUNTY AGRICULTURAL PLANS AND POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
Agriculture Element/ AGP 12	Pest, Vertebrate, and Weed Management: Assure that pests and noxious weeds are managed on county owned properties so as to avoid impacts on agriculture. Encourage integrated pest management on private and public lands.	This issue is discussed in Section 4.2.6 below.	Potentially consistent
Agriculture Element/ AGP 18	Locate new buildings, access roads, and structures so as to protect agricultural land.	The project site is not presently, nor historically been used for agriculture other than grazing activities, a small orchard, and a few acres of corn on the south side of SR 58. The area where mining will occur is not suitable for agricultural activities due to the steep slopes and poor soil conditions within the proposed mining area.	Potentially consistent

4.2.4 Assessment Methodology

The impact assessment in this EIR is based on a review of soil types on the property and the agricultural ratings; a review of past and current agricultural uses on the property and the vicinity; and, a review of applicable policies and programs in San Luis Obispo County. Representatives of the County Department of Agriculture were consulted to identify the importance of agricultural value on the project site and other issue. Their concerns were taken into account and provided guidance in research and assessment of agricultural impacts.

4.2.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Agricultural Resources within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

1. Converting prime agricultural land to non-agricultural use; and/or
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract; and/or

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3. Involve other changes in the existing environment, which due to their location or nature, could result in conversion of agricultural land (farmland of statewide importance) to non-agricultural use; and/or
4. Impair agricultural use of other property or result in conversion to other uses.

The property does not contain any prime agricultural land or land within a Williamson Act contract, so the first two of the above criteria do not apply. The proposed project would convert a small area of agricultural soil and land to other uses, so the third criteria does apply, and is considered in the analysis that follows below. With respect to potential impairment or other effects on agricultural uses in the general area, two specific issues were identified during the scoping process. These include the potential to introduce weeds or other invasive species into the area, and the potential to create dust that might adversely affect agricultural uses, both of which are discussed below. The effect of the proposed project on water use is discussed in Section 4.13 of this EIR.

4.2.6 Project Impacts and Mitigation Measures

Loss of Agricultural Land

Development of the quarry site itself will not affect any substantial area of Important Agricultural Soils or areas used for agricultural purposes, but the access road and related improvements will cross agricultural land (farmland of statewide importance). As a result of the project, the loss of agricultural soil and grazing land will amount to approximately 2.1 acres on the north side of SR 58. The project will directly convert 1.2 acres of land containing Metz loamy sand and currently used for grazing, into the project access road, stormwater detention basin, and related improvements. In addition, 0.9 acre of pasture land also containing Metz loamy sand on the north side of SR 58 will become separated from the retained agricultural uses and ranch complex; thus, its usefulness for agricultural purposes may be reduced.

The other remaining grazing uses on the Oster property are expected to continue, including the 1.6 acres of Metz loamy sand used for pasture land south of SR 58, and several acres of rangeland located on the less steep western portion of the property. The loss of the grazing land and Metz loamy sand is considered adverse; however, because of the small area involved, the absence of irrigation improvements, and the relatively low grazing potential of non-irrigated land, this loss would be considered less than significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT AG-1: Loss of Agricultural Land. The project involves the direct conversion of 1.2 acres of Metz loamy sand, 0-5% slope, which is currently used for grazing, and loss of access to an additional 0.9 acres. This is a relatively small area	MM AG-1: Loss of Agricultural Land. Since this effect is less than significant, no mitigation is required.	Less than significant

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Description of Impact	Mitigation Measure	Residual impact
of Important Agricultural Soil and the current agricultural use is of low intensity.		

Introduction of Invasive Species

There are many non-native invasive species in San Luis Obispo County including yellow starthistle, which if left unchecked could have an adverse environmental impact. The construction and operation of the quarry would require the movement of vehicles to and from the project site on a regular basis. These vehicles could potentially bring unwanted invasive species or seeds onto the property. Revegetation and erosion control could also be a source of invasive species introduction if non-native or improper species are used. This is considered a potentially significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual impact
IMPACT AG-2: Introduction of Invasive Species. Ground disturbance and regular movement of vehicles into and out of the property, and revegetation efforts during reclamation, will increase the potential for an introduction of invasive weed species. These weed species may impair the agricultural use of other properties near the project.	MM AG-2: Introduction of Invasive Species. Prior to the issuance of the Notice to Proceed, the applicant shall incorporate a Weed Control Program into the Operational Plan and Reclamation Plan for County review and approval. The Weed Control Plan shall include methods, success criteria and a monitoring and reporting program to the satisfaction of the County.	Less than significant

Dust Generation

The development and use of the quarry would involve grading, operations, and aggregate movement that have the potential to generate dust and adversely harm agricultural operations. Due to the use of watering trucks and the nature of the extracted material, dust from the mining operation will be limited and should not carry far beyond the property. Since there are no agricultural operations in the immediate vicinity, there would not be direct impacts from quarry operations. Implementation of dust control measures associated with the proposed quarry will be monitored pursuant to APCD Rule 401 and 403. Indirect impacts, such as truck travel to and from the site, would not contribute significantly to fugitive dust beyond the site vicinity as they will be using SR 58 which is paved with reinforced shoulders and is regularly maintained. Therefore, project impact is less than significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT AG-3: Dust Generation. Dust will be generated during the quarry development and use which could adversely affect agricultural resources.	MM AG-3: Dust Generation. Mitigation Measure AQ-1b serves as adequate mitigation for Impact AG-3.	Less than significant

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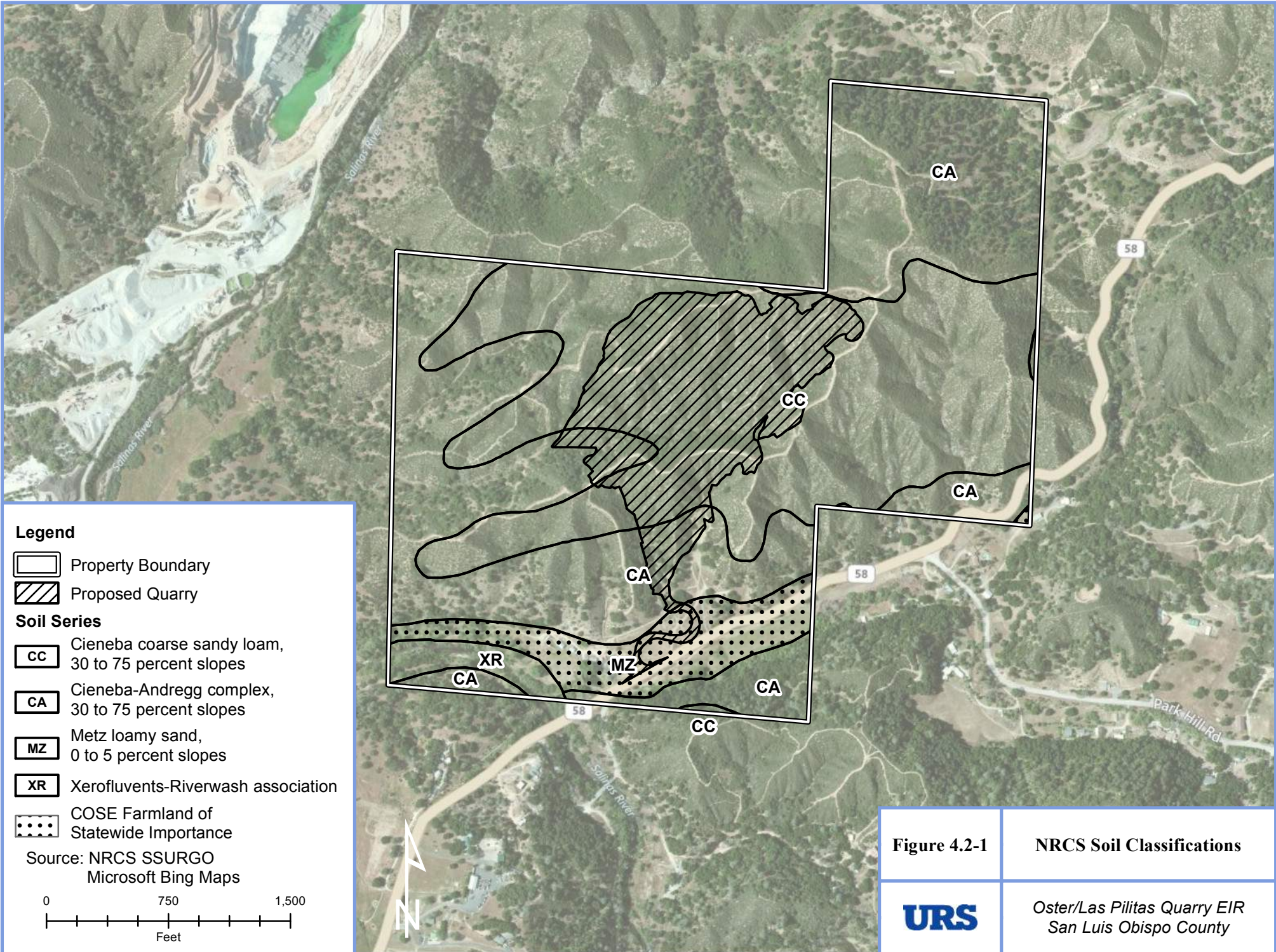
Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries could be approved and constructed in this area. Areas suitable for aggregate mining, however, are generally steep with shallow soils and are not capable of supporting intensive agricultural use. For this reason, development of future quarries similar to the proposed project is not expected to have a cumulative significant effect on agricultural lands.



Countywide, there was a loss of 5,840 acres of agricultural land from 2006 to 2008 (FMMP). The proposed project would result in a loss of approximately 2.1 acres of grazing land which is relatively small in size and is generally of low productivity. This loss does not contribute a considerable or significant proportion of the total agriculture land in the County or of the loss of agricultural land over time. With proper implementation of best use practices and mitigation measures, the impacts related to the introduction of invasive species would be considered less than significant. Given the lack of agricultural uses within the immediate vicinity and with proper implementation of APCD procedures, the threat of dust damage from this project and other sources in the vicinity is considered less than significant.

In summary, due to the steep topography and poor soils conditions found in high value aggregate areas, and with the continued application of policies and programs designed to help preserve agricultural lands and activities within the County, potential cumulative impacts to Agricultural Resources are less than significant.






Description of Impact	Mitigation Measure	Residual impact
IMPACT AG-4: Cumulative Effects related to Agricultural Resources. The proposed project would result in a loss of approximately 2.1 acres of grazing land which is relatively small in size and is generally of low productivity.	MM AG-4: Cumulative Effects related to Agricultural Resources. Since this effect is less than significant, no mitigation is required.	Less than significant



Legend

-  Property Boundary
-  Proposed Quarry

Soil Series

-  CC Cieneba coarse sandy loam, 30 to 75 percent slopes
-  CA Cieneba-Andregg complex, 30 to 75 percent slopes
-  MZ Metz loamy sand, 0 to 5 percent slopes
-  XR Xerofluvents-Riverwash association
-  COSE Farmland of Statewide Importance

Source: NRCS SSURGO
Microsoft Bing Maps

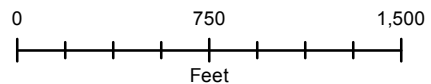
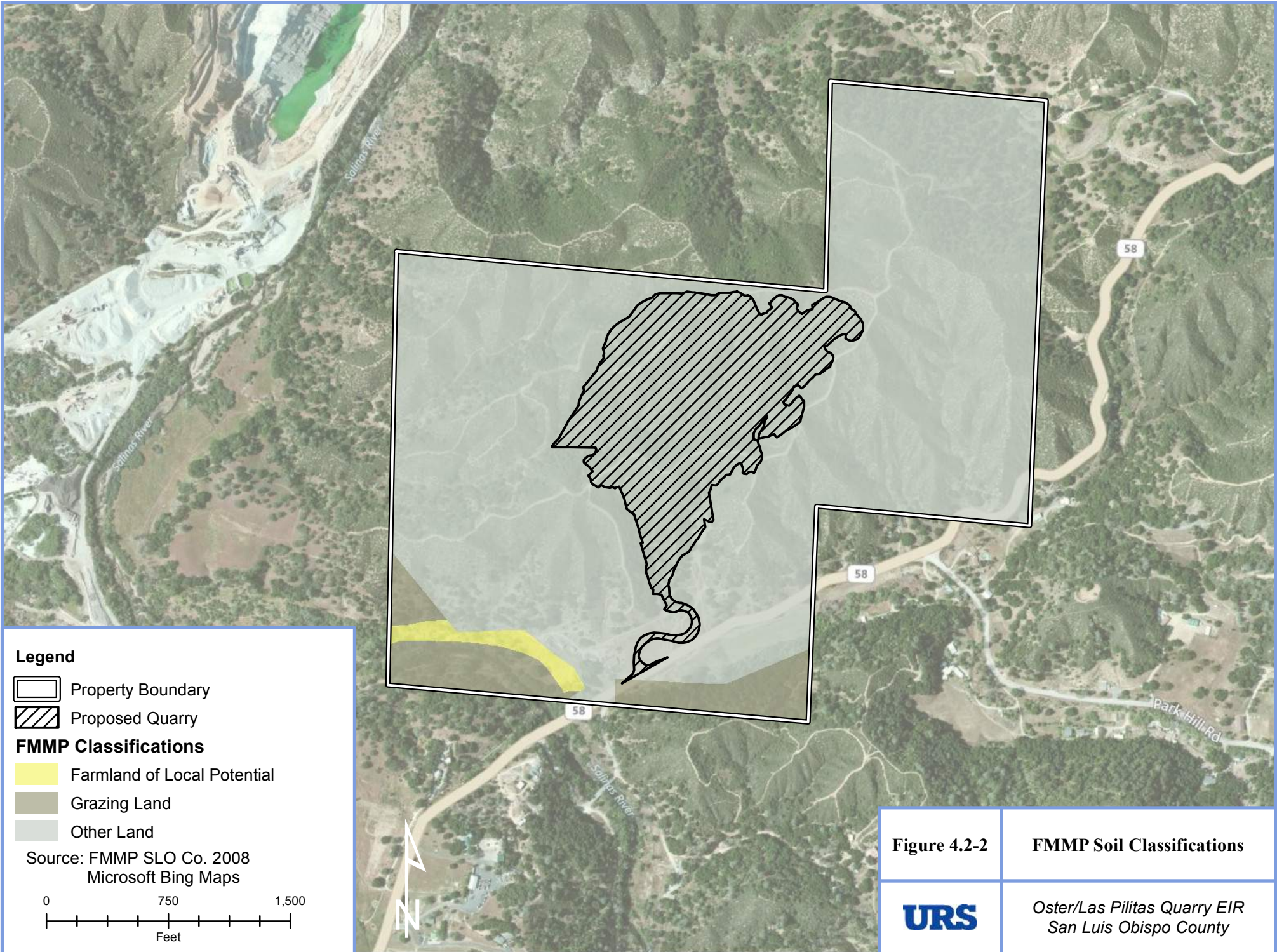


Figure 4.2-1



NRCS Soil Classifications






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Legend

-  Property Boundary
-  Proposed Quarry

FMMP Classifications

-  Farmland of Local Potential
-  Grazing Land
-  Other Land

Source: FMMP SLO Co. 2008
Microsoft Bing Maps

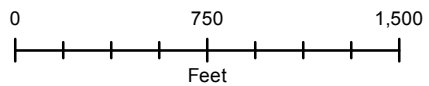


Figure 4.2-2

FMMP Soil Classifications



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4.3 AIR QUALITY

4.3.1 Existing Conditions

Appendix D of this EIR, prepared by Sespe Consulting, Inc., contains the air quality impact assessment, health risk assessment, greenhouse gas evaluation, and other information related to air quality. A separate section in this EIR (Section 4.4) discusses greenhouse gas emissions. The following pages summarize the air quality impact assessment based primarily on the work by Sespe Consultants. The San Luis Obispo County Air Pollution Control District (SLOAPCD) publishes a CEQA Air Quality Handbook that provides guidance and criteria used by the District in evaluating impacts and mitigation measures for projects. The modeling and technical analysis prepared by Sespe was completed in late 2011 and updated in 2012 after publication of the 2012 edition of the SLOAPCD handbook.

Regional Setting

San Luis Obispo County constitutes a land area of approximately 3,316 square miles with varied vegetation, topography and climate. From a geographical and meteorological standpoint, the county can be divided into three general regions: the Coastal Plateau, the Upper Salinas River Valley, and the East County Plain. Air quality in each of these regions is characteristically different, although the physical features which divide them provide only limited barriers to transport of pollutants between regions.

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland.

Regional meteorology is largely dominated by a persistent high pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland.

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is

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received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year.

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze.

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a “sloshing” effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, “trapping” pollutants near the surface.

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a “Santa Ana” condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the “post Santa Ana” condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county.

The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange, or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions.

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence

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throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses.

During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating.

In contrast, in the summertime the presence of the Pacific high pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1,000 to 2,500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion.

Local Setting

The Project is within the Upper Salinas River Valley. The Upper Salinas River Valley, located in the northern one-third of the county, houses 25 percent of the county's population. Historically, this region has experienced the highest ozone and particulate levels in the county. Transport of ozone precursors from the coastal plateau and from the San Joaquin Valley may contribute to this condition.

Criteria Pollutants and Ambient Air Quality Standards

Federal and state monitoring and control of air quality is focused on six common air pollutants that are known to cause adverse health effects and environmental and property damage. These six criteria pollutants are briefly described in the following paragraphs, and more information regarding their characteristics is provided in Appendix D (see Appendix B in the Sespe Consultants report).

Ozone (O₃) is formed by the reaction of sunlight with reactive organic gases (ROG, similar to and sometimes referenced as volatile organic compounds or VOC) and nitrogen oxides (NO_x). Ozone is an oxidizing agent and causes irritation in lung tissue that can affect breathing, transfer of oxygen to the blood system, and the ability of the respiratory system to remove foreign particles and fight infection. Ozone is not emitted directly by ground-level pollutant sources, but is formed in the lower atmosphere as a secondary pollutant from the emissions of volatile organic compounds and combustion byproducts. At much higher

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altitudes (8 to 20 miles) ozone forms naturally in reactions of sunlight with oxygen, and has the beneficial effect of absorbing ultraviolet rays from the sun.

Particulate Matter (PM₁₀ and PM_{2.5}) is the general name for very small pieces of solids suspended in the air. It includes a complex mixture of man-made and natural substances such as dust from soil, sea salt from the evaporation of ocean spray, sulfates and nitrates that condense in the atmosphere, elemental carbon (soot), and other materials. The focus of regulation is on smaller sized particles, including those measuring 10 microns or less in diameter (PM₁₀). Such small particles are easily inhaled and deposit within the lungs where they can cause irritation and damage directly, or because of the chemicals that may be adsorbed on their surface and introduced into the lungs. Since 2003, newer standards have been developed for even finer particulates—those with diameters of 2.5 microns (PM_{2.5}) or less, which can reach even farther into the lungs causing disease and decreased respiratory function. The main pollutant generated by mining activities is suspended particulate matter. Emissions of suspended particulates that cannot be collected and discharged through a stack are considered fugitive. Fugitive dust is primarily a concern during construction processes such as excavation and grading which disturb earthen materials. In addition, diesel exhaust contains particulates that are considered a toxic air contaminant (see below), which would also be present during mining and contribute to total particulate matter levels.

Carbon monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fuel. When inhaled, it displaces oxygen in blood cells and impairs the body's ability to transport oxygen to tissues where it is needed for cellular respiration.

Nitrogen dioxide (NO₂) is a brownish gas in high concentration, and is formed during combustion or rapidly in the atmosphere when oxygen reacts with the colorless gas nitrogen oxide to form nitrogen dioxide. The two, and related compounds, are collectively called "nitrogen oxides." When inhaled, nitrogen dioxide causes irritation and constriction of airways in the lungs. In the atmosphere, it is also a catalyst in the formation of ozone.

Sulfur dioxide (SO₂) is a sharply pungent and colorless gas formed mainly from the combustion of sulfur containing fuels (mainly coal in other parts of the country). In the atmosphere it reacts with water to form sulfuric acid, and when inhaled it causes respiratory irritation and breathing difficulty.

Lead (Pb) was released into the atmosphere in past years mainly through evaporative losses from leaded gasoline. Although its use in motor vehicles has been discontinued, it can still be emitted from some industrial processes and combustion of lead containing materials. When absorbed by the body it can cause neurological damage, and impairs the formation of blood cells.

The US Environmental Protection Agency (USEPA) has established national Ambient Air Quality Standards (AAQ) for the above criteria pollutants, and California has established

similar state AAQS. The AAQS are defined as concentrations in the atmosphere that must not be exceeded more than a specified number of times during a reporting period.

From the above list, the pollutants of most concern in California are ozone and particulate matter – these continue to occur in the atmosphere at concentrations that are near or above applicable standards. Because ozone is not emitted directly from pollution sources, emission standards are established for ROG and NO_x, which are called ozone precursors. These ozone precursors and particulate matter are emitted from a wide variety of dispersed sources, such as motor vehicles, agricultural activities, general construction, and other common human activities. Their control requires attention to transportation, land use, and energy use, as well as to industrial sources. The other criteria pollutants remain important, but controls on industrial sources and other regulations have reduced their concentrations in most areas.

Table 4.3-1 below presents both the federal and the California AAQS. More information related to the information in the table is available in Appendix D, including a series of footnotes that explain the various units in the table, how the various standards apply in different areas of the state, and recent changes in the standards.

Toxic Air Contaminants

Toxic Air Contaminants (TAC) include a large number of compounds, mostly organic substances, listed by California that are either carcinogenic or cause other acute or chronic health effects even when present in small concentrations. At the federal level the similar listing is called Hazardous Air Pollutants (HAP). The California Office of Environmental Health Hazard Assessment (OEHHA) is responsible for developing the scientific basis for listing TACs while the California Air Resources Board (CARB) is responsible for implementing air toxic control measures (ATCM). In 1993, passage of Assembly Bill 2728 required the state to include the 189 federal HAPs within the state TAC list. More information regarding the regulation of TACs is contained in Section 4.3.3.

For purposes of this project, two toxic air contaminants (TACs) are of primary concern. These are Diesel Particulate Matter (DPM) and asbestos. DPM is the result of combustion of diesel fuel, and consists of very fine particulates including soot, organic compounds and other substances. It was identified by California as a TAC based on its carcinogenic potential in 1998, and DPM accounts for about 70 percent of the cancer risk from air pollution in urban areas where on-road sources dominate the inventory. Control programs at the federal and state level are aimed at replacing diesel engines with other power sources where feasible and reducing DPM emissions, as well as criteria pollutants, from engine exhaust through improved technology. DPM is the major constituent evaluated in the health risk assessment for the project, although other substances are also included. Asbestos is still found in older buildings as an insulation or other construction material, but it is also “naturally occurring

**TABLE 4.3-1
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
Ozone (O)	1 Hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m ³)	0.075 ppm (147µg/m)	
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	
Fine Particulate Matter (PM _{2.5})	24 Hour	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	—	—
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	53 ppb (100 µg/m ³)	Same as Primary Standard
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
	3 Hour	—	—	0.5 ppm (1,300 µg/m)
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas)	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
Lead	30 Day Average	1.5 µg/m ³	—	—
	Calendar Quarter	—	1.5 µg/m ³ (for certain areas)	Same as Primary Standard
	Rolling 3-month Average	—	0.15 µg/m ³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer		No National Standards
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

asbestos” (NOA) associated with serpentine minerals that are widespread in San Luis Obispo County. NOA can be released to the air during grading and construction in such areas.

Existing Sources of Air Pollutants

No substantial sources of air pollutants currently exist on-site. Sources of air pollutants in close proximity to the project include traffic running on SR 58 and the Hanson Santa Margarita quarry about one-half mile to the west. Other aggregate mines in the region include the Rocky Canyon quarry (five miles to the northwest), the Navajo Creek quarry about 17 miles to the east, and smaller sand and gravel operations along the Salinas River and its tributaries generally within 5 to 15 miles to the north and northeast of the proposed quarry.

SR 58 currently carries average daily traffic volumes that range from 7,200 in the vicinity of US Highway 101 to 1,850 adjacent to the project site. About 3 percent of this traffic volume is heavy trucks, which is typical for highways that do not carry a high proportion of inter-regional truck traffic (such as SR 46, the next major east-west route north of SR 58). Trucks carrying aggregate material and other products along SR 58 constitute an existing source of DPM and other exhaust pollutants in the vicinity. The CARB Community Health Air Pollution Information System (CHAPIS) identifies this source (SR 58) as the only major source of DPM in the area, and also lists the two existing quarries (Hanson Santa Margarita and CalPortland Rocky Canyon) and the Phillips 66 pump station as other sources of air pollution in the area (CARB 2012).

Railroad locomotive operations along the UPRR line that passes through Santa Margarita are an additional source of diesel exhaust and DPM that affects the area.

Ambient Criteria Pollutant Concentrations

Table 4.3-2 contains the concentration data and number of days exceeding each AAQS monitored in the County by SLOAPCD. The site is located closest to the Atascadero monitoring station. The 2010 Network Monitoring Plan published by SLOAPCD describes the Atascadero station:

- Atascadero Ozone – Operated by the SLOAPCD since 1988, this population-oriented neighborhood scale ozone monitor is located near the central business district of downtown Atascadero and is bounded on two sides by elementary schools. It provides a measurement of representative ozone concentration for the City of Atascadero. Ozone concentrations at this site exhibit strong diurnal fluctuations caused by titration of ozone by oxides of nitrogen from nearby mobile and residential sources. Measured concentrations at this site are often similar to those recorded at Paso Robles. The highest ozone concentrations at Atascadero occur when high pressure over the interior southwest U.S. causes transport of “old” ozone and other pollutants into San Luis Obispo County from the east. Under these infrequent conditions transported ozone enhanced by local

**TABLE 4.3-2
AMBIENT AIR QUALITY DATA**

Measurement	Units	2007	2008	2009	2010
NO ₂ – Max. 1 hr. avg. conc.	Ppm	0.046	0.052	0.045	*
NO ₂ – Days > State Std.	Days	0	0	0	*
NO ₂ – Annual Arithmetic Mean	Ppb	9	8	7	*
NO ₂ – AAM Nat. > Nat. Std.	Year	0	0	0	*
NO ₂ – AAM State	Ppm	0.0091	0.0077	0.0070	*
NO ₂ – AAM State > State Std.	Year	0	0	0	*
Ozone – Max. 1 hour avg. conc.	Ppm	0.079	0.087	0.078	0.077
Ozone – Hrs. > State 1 hr. Std.	hour	0	0	0	0
Ozone – Max. 8 hr. (overlap)	Ppm	0.071	0.079	0.068	0.067
Ozone – Max 8-hr. (State)	Ppm	0.072	0.080	0.068	0.068
Ozone – Days above Nat 8hr. Std	Days	0	1	0	0
Ozone – Days above State 8-hr.	Days	1	3	0	0
PM ₁₀ – Max. 24 hr. avg. conc. – S	µg/m ³	49	43.6	36	23
PM ₁₀ – Max. 24 hr. (Nat'l.)	µg/m ³	48	44.1	36	23
PM ₁₀ – Calc. Days > State Std.	Days	*	0	0	*
PM ₁₀ – Annual Avg. (State)	µg/m ³		20.5	17.5	*
PM ₁₀ – Max. Ann. Avg. from 3 yr. (S)	µg/m ³	18	20	20	20
PM ₁₀ – Calc. Days > Nat. Std.	Days	*	0	0	*
PM _{2.5} – Max. 24 hr. (State)	µg/m ³	27.6	28.5	26.9	12.4
PM _{2.5} – Max. 24 hr. (Nat'l)	µg/m ³	23.9	28.5	51.6	21.2
PM _{2.5} – Est. Days > Nat. 24-hr. std.	Days	0	0	2	0
PM _{2.5} – 98 th Percentile (Nat'l)	µg/m ³	22.7	20.2	26.4	16.0
PM _{2.5} – 3yr. Annual AOQ (Nat'l)	µg/m ³	7.9	8.1	9.2	6.3
PM _{2.5} – Annual Avg. (State)	µg/m ³	8.0	*	7.9	*

Atascadero-Lewis Avenue Monitoring Station Data from CARB website.

* = no data, Max. = maximum, Avg. = average, Ann. = annual, AAM = annual arithmetic mean, Conc. = concentration, Std = standard, hr. = hour, Nat'l = national.

pollutants can cause highly elevated concentrations. The prevailing west or northwest winds from the coast help keep ozone levels at Atascadero low most of the time.

- Atascadero Nitrogen Dioxide – Operated by SLOAPCD since 1990, this population-oriented monitor is considered neighborhood scale and highest concentration for NO₂. This, the only NO₂ monitor in the Salinas River air basin, records the highest NO, NO₂ and NO_x levels in the county. The monitor's location downtown has established a strong diurnal inverse relationship between ozone and NO₂ levels caused by local mobile sources and residential and commercial combustion of natural gas.

- Atascadero Particulates – Operated by SLOAPCD. The PM₁₀ monitor has been operated since 1988. PM_{2.5} monitoring has occurred since 1999 with several different pieces of equipment. All of the particulate monitors used at this station have been urban in scale and provide measurements representative of particulate concentrations in the city of Atascadero.

Other monitoring stations are sited to obtain regional background concentrations. These include Morro Bay, Nipomo Regional Park and Carrizo Plains for ozone concentrations; and Nipomo Regional Park for nitrogen dioxide concentrations. Sulfur dioxide is measured at one station location near a stationary source and carbon monoxide is no longer monitored in the County because concentrations are consistently low.

Ambient Cancer Risk

The California Air Resources Board (CARB) risk maps show that ambient air in the project vicinity exhibits a total cancer risk between zero and 100 excess cancer cases per one million people exposed (see Figure 3 in Appendix A of the air quality impact assessment in Appendix D of this EIR). Relatively higher existing cancer rates (from 50 to 100) are associated generally with the population centers of the County, while the more remote regions are in the 0 to 50 range. A typical value for a worst case residence located as close as possible to SR 58, computed from the SLOAPCD Health Risk Assessment (HRA) Screening Tool (SLOAPCD 2011), is just over 17 excess cancer cases per one million people, which is consistent with the CARB mapping. With the advent of additional controls on diesel exhaust from on-road trucks, these values may be expected to decrease over time. These statements of cancer risk relate only to the risk posed by air pollution based on sources considered by the Emissions Inventory Branch of the CARB. They do not represent actual incidence rates for cancer from all causes.

Nearby Receptors

Figure 4.3-1 and Table 4.3-3 describe receptors (AQR-1 through AQR-8) near the project including residences within 0.25 mile of the project site and outside of the property boundary that contains the project. There are no schools, hospitals, or other uses that are considered sensitive receptors in the vicinity of the project site. The nearest school is Santa Margarita Elementary, over two miles southwest from the proposed quarry location along the proposed truck route.

4.3.2 San Luis Obispo County Plans and Policies

Table 4.3-4 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan, relative to this proposed surface mining operation, that are applicable to Air Quality.

**TABLE 4.3-3
SENSITIVE RECEPTORS – AIR QUALITY**

Receptor No.	Distance to Site of Quarry Operations (Feet)	Distance to Property Lines of Quarry (Feet)	Type
AQR-1	1,036	258	Residence
AQR-2	815	50	Residence
AQR-3	1,048	2,594	Residence
AQR-4	1,777	52	Residence
AQR-5	2,282	1,102	Residence
AQR-6	1,202	353	Residence
AQR-7	757	372	Residence
AQR-8	1,116	922	Residence

4.3.3 Regulatory Setting

Overview of Air Quality Planning and Regulation

Regulations that control air pollutants are developed at the federal, state, and local levels. The Federal Clean Air Act and the California Clean Air Act each contain comprehensive frameworks for air quality planning and regulation. The regulatory system at both levels is based the establishment of Ambient Air Quality Standards (AAQS), and then regulating sources of air pollutants so that the AAQS are not exceeded. Specific limitations are also established for the emissions of toxic air contaminants, discussed below. Some regulations are implemented directly at the federal and state levels, such as the exhaust emissions requirements for vehicles and equipment. Other requirements are implemented through the local Rules and Regulations adopted by the local APCD. Examples of these local requirements include the permitting and control of emissions from point sources and rules to control emissions of fugitive dust or other nuisances.

The federal and state programs require the monitoring of ambient air quality. Geographic areas are classified by US EPA and CARB based on whether the ambient air in the area meets the AAQSs. An “attainment area” is an area in which pollutant concentrations are less than or equal to the AAQS while “non-attainment areas” have pollution levels that exceed the AAQS a specified number of days per year.

The project is located in the South Central Coast Air Basin (SCCAB), which encompasses the counties of San Luis Obispo, Santa Barbara and Ventura. San Luis Obispo County is considered to be in “non-attainment” for the California ozone and PM₁₀ AAQS, but is in attainment for all other California AAQS. With respect to the national AAQS, the US EPA recently designated the eastern portion of San Luis Obispo County as a marginal non-attainment area for the federal ozone standard (Fed Reg Vol 77 No. 98, May 21, 2012, pages

**TABLE 4.3-4
POLICY CONSISTENCY ANALYSIS – AIR QUALITY**

Source	Policy Statement	Discussion	Preliminary Determination
Inland Framework for Planning – Land Use Element, Planning Principle 1, Policy 4	Preserve and protect the air quality of the county by seeking to exceed or at least maintain the minimum state and federal ambient air quality standards.	Operations within the proposed quarry could exceed SLOAPCD emissions thresholds, but are expected to be reduced through mitigation measures consistent with SLOAPCD procedures, which should maintain state and federal air quality standards.	Potentially Consistent
COSE Policy AQ 3.2/Implementation Strategy AQ 3.2.1:	The County's CEQA process will use the APCD's CEQA Guidelines to determine significance of impacts and to identify minimum project design and mitigation requirements.	These Guidelines have been followed in the preparation of the analysis in this EIR, and adherence to the procedures and requirements of the SLOAPCD will be a condition in the CUP.	Potentially Consistent
COSE Policy AQ 3.7 Reduce vehicle idling	Encourage the reduction of heavy-vehicle idling throughout the county, particularly near schools, hospitals, senior care facilities, and areas prone to concentrations of people, including residential areas.	Idling restrictions will be posted on-site, and made an ongoing condition of the Use Permit. Trucks are not expected to stop/idle in the vicinity of schools or other sensitive receptors along the truck route.	Potentially Consistent
COSE Policy AQ 3.8 Reduce dust emissions	Reduce PM ₁₀ and PM _{2.5} emissions from unpaved and paved County roads to the maximum extent feasible.	Project design includes paving access road from SR 58 to quarry entrance, and use of water to suppress dust from internal working areas.	Potentially Consistent

30108-30109). For other criteria pollutants, the County is considered “unclassified,” meaning that there is insufficient information to determine whether it is in attainment or nonattainment status. More information regarding the attainment status of the County is contained in Appendix D and is available from San Luis Obispo County APCD (2012a).

In order to make progress towards attainment with the AAQS, each state and air district containing federal non-attainment areas is required to develop a written plan for cleaning the air in those areas. These plans are called State Implementation Plans (SIP). California’s SIP contains mobile source and consumer product emission control strategies proposed by CARB and a compilation of stationary and area source strategies that have been developed by local air districts under CARB supervision. Through these plans, the state and local air districts outline efforts that they will take to reduce air pollutant concentrations to levels below the standards.

State law also requires each air district in state non-attainment areas to develop a Clean Air Plan (CAP) designed to achieve the state standards by the earliest practical date; and this plan

must be updated every three years. These plans must assess the cost-effectiveness of available and proposed emission control measures. The SLOAPCD CAP was prepared in 2001, and outlines the District's strategies to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. Every three years, the SLOAPCD prepares a Triennial Report of the air quality improvement for comparison to commitments and attainment demonstrations in the CAP.

Toxic Air Contaminant Regulations

Hazardous air pollutants (HAP) are pollutants listed by US EPA that pose acute, chronic, and/or cancer health risks to exposed individuals. They are regulated through the establishment of Emissions Standards for Hazardous Air Pollutants (ESHAPS), which are then enforced through the states and local APCDs. In California a similar regulatory program addresses Toxic Air Contaminants (TAC).

The Office of Environmental Health Hazard Assessment (OEHHA) is responsible for developing the scientific basis for listing TACs while the California Air Resources Board (CARB) is responsible for implementing air toxic control measures (ATCM). Assembly Bill 1807 (AB 1807) passed in 1983 requires the state of California to identify and control TACs. TACs are formally identified through a detailed process which starts when a chemical's risk to human health and the environment is above certain criteria. Once TACs are identified, the emission sources, controls, technologies and costs are reviewed to determine if regulation is needed to reduce emissions. In 1993, AB1807 was amended by passage of Assembly Bill 2728 (AB 2728) which requires the State to list the 189 federal HAPs in the TAC list.

In 1987, the AB 2588 air toxics "hot spots" program was established. This program requires subject facilities to report their air toxics emissions, determine localized health risks, and notify nearby residents of significant risks. The program was amended in 1992 to require facilities to reduce any significant risks through the development of a risk management plan. The Hotspots Analysis and Reporting Program (HARP) is a tool that is used to assist with calculating TAC emission inventories and performing health risk assessments under the AB 2588 Program.

Diesel exhaust is regulated by U.S. EPA and by CARB through rules that are adopted to limit emissions from on-highway heavy duty trucks and buses and from off-road diesel vehicles. The Off-Road Vehicle Regulation was amended by the ARB in December 2010. Prior to that time, the Rule phased in from 2010 to 2020; but the December 2010 rulemaking pushed the start date back to 2014 and the date of final implementation back to 2024. In addition, until ARB receives a waiver from U.S. EPA to regulate in-use off-road engines, the provisions that require further control are not enforceable. Registering fleets through the Diesel Off-road On-line Reporting System (DOORS), labeling equipment, idling requirements and sale notification are requirements of the Off-Road Rule that are still in effect. The Regulatory Advisory describing the enforcement delay rule was last updated in May 2011.

On May 19, 2011, ARB issued 15-day amendments to the Truck and Bus Regulation that was adopted in December 2010. New features include language related to low-mileage construction truck credit, early purchase of a new vehicle, credit exchange between On- and Off-Road Rules (bubble concept), and expansion of some credits to more compliance paths. Credits and exemptions aside, by January 1, 2012, trucks over 26,000 pounds that were manufactured between 1996 and 1999 are required to have a particulate filter. By January 1, 2014 all trucks over 26,000 pounds will be required to have a particulate filter. Engine replacement requirements begin in 2015 and end in 2023 when all vehicles will be 2010 model year or later. Fleets taking advantage of certain options and credits start reporting on January 1, 2012. Trucks between 14,000 pounds to 26,000 pounds start compliance in 2015 with 1995 and older engines.

Portable engines are regulated by an air toxic control measure that limits diesel particulate matter and may also be regulated by the Portable Equipment Registration Program (PERP) or local air district permit. In-use portable engines regulated by the ATCM begin phasing in controls to meet emissions reductions criteria on January 1 of 2013, 2017, and 2020. By 2020, in-use portable engines will have Tier 4 particulate emissions characteristics. The PERP program requires compliance with the ATCM for in-use engines and applications for Tier 3 engines may be submitted until June 30, 2012 after which time Interim Tier 4 is required for new registrations in PERP.

Listing of Regulations

Federal, state, and local requirements, applicable to Air Quality, are summarized below in Table 4.3-5.

4.3.4 Assessment Methodology

Emissions from the project—both operations at the project site and the on highway truck traffic—were estimated using standard methods and data bases for source emissions (e.g., AP-42, EMFAC2011, OFFROAD2011, CalEEMod) and were then compared to the SLOAPCD mass-based thresholds to determine the significance of impacts on regional air quality (Appendices C, D, and E contained in the Sespe Consultants Air Quality Assessment, which is Appendix D in this EIR, contains the emissions inventory work). Reasonable worst case assumptions were developed to estimate annual emissions (with the projected maximum rate of production of 500,000 tons per year, including 100 days per year of portable rock processing plant operation, and 20 days per year of blasting). Separate estimates were prepared for a worst case peak single day emission scenario.

The potential effects of toxic air contaminants were also assessed using air dispersion modeling software (i.e., ISCST3 in the Lakes AERMOD View Software suite) and health risk assessment software (i.e., HARP and HARP Onramp) to identify potential for the project to result in a localized hot spot (Appendix F in the Sespe Consultants report contains the dispersion model input and data).

**TABLE 4.3-5
SUMMARY OF FEDERAL, STATE, AND LOCAL
AIR QUALITY REQUIREMENTS**

Requirement	Administering Agency	Applicability
Federal		
40 CFR Part 50 – AAQS	US EPA	Establishes national Ambient Air Quality Standards (AAQS). Primary AAQS are designed to protect human health, with an adequate margin of safety, including sensitive populations such as children, the elderly, and individuals suffering from respiratory disease. Secondary AAQS are designed to protect public welfare and property from damage.
40 CFR Parts 51 and 52 – Implementation Plans	US EPA and states	Requirements for states to prepare Implementation Plans, procedures for adoption, submittal, approval, and promulgation.
40 CFR Part 60 – Performance Standards for New Stationary Sources	US EPA and local APCD	Establishes emissions limits and procedures for specified industrial point sources. May not apply to proposed quarry, which would have only offroad equipment, portable equipment, and fugitive dust sources. Final determination of applicability is to be made by SLOAPCD.
40 CFR Part 61 and 63 – NESHAPS	US EPA and local APCD	Lists Hazardous Air Pollutants (HAPs) and establishes National Emission Standards for HAPs (NESHAPS). NESHAPS for source categories. Not expected to apply to quarry.
40 CFR Part 80 – Regulation of Fuels and Additives	US EPA	Establishes low sulfur content (2001) and Ultra Low Sulfur Diesel (ULSD) specifications starting in 2007.
40 CFR Part 86 – Control of emissions from New and In-Use Highway Vehicles and engines	US EPA	More restrictive emissions standards, ending with 86.007-11 for 2007 and later model year diesel heavy-duty engines and vehicles.
40 CFR Part 89 – Control of Emissions from New and In-Use Nonroad Compression Ignition Vehicles	US EPA	Applies to offroad trucks, other mobile equipment.
State		
26 HSC 39606	Legislature directed CARB to adopt California Ambient Air Quality Standards (AAQS)	For some pollutants, CA AAQS are more stringent than national AAQS. CA AAQS are in 17 CCR 70200.

**TABLE 4.3-5 (CONTINUED)
SUMMARY OF FEDERAL, STATE, AND LOCAL
AIR QUALITY REQUIREMENTS**

Requirement	Administering Agency	Applicability
1 HSC 425	Department of Health Services makes recommendations relative to AAQS to CARB	
25.5 HSC 38500 et seq.	California Global Warming Solutions Act of 2006	Discussed more in Section 4.4 of this EIR.
26 HSC 40910 – District Plans to Attain State Ambient Air Quality Standards	Various APCDs (and Air Quality Management districts) in the state	Each District is responsible for preparing a plan for attaining and maintaining CA AAQS. Includes references to federal AAQS.
26 HSC Part 4 41500 – Nonvehicular Air Pollution Control	CARB	Emissions limitations for various activities and equipment types. Includes CARB review of District attainment plans.
26 HSC Part 5 43000 – Vehicular Air Pollution Control	CARB	CARB to adopt and implement CA motor vehicle emission standards.
26 HSC Part 6 44300 Air Toxics “Hot Spots” Information and Assessment	CARB and Districts	Applies to industrial sources releasing specified pollutants.
California Code of Regulations. Title 13. Motor Vehicles. Division 3. Air Resources Board	CARB	Establishes California fuel standards.
13 CCR Div 3. Chapter 5. Standards for Motor Vehicle Fuels. Article 2. Standards for Diesel Fuel	CARB	Sets standards for sulfur content (Section 2281), aromatic hydrocarbon content (2282).
13 CCR, Div 3. Chapter 9 Off-Road Vehicles and Engines Pollution Control Devices, Article 4 Off-Road Compression-Ignition Engines and Equipment	CARB	Section's 2420 – 2427 establishes emission limits for heavy-duty off-road diesel engines manufactured after 1996 and 2000.

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**TABLE 4.3-5 (CONTINUED)
SUMMARY OF FEDERAL, STATE, AND LOCAL
AIR QUALITY REQUIREMENTS**

Requirement	Administering Agency	Applicability
13 CCR Div 3, Ch 9, Article 4.8 In-Use Off-Road Diesel Fueled Fleets	CARB	Section 2449 – 2449.3, applies to off-road equipment with engines greater than 25 hp; establishes limits for NO _x , DPM and other criteria pollutants.
13 CCR Div 3, Ch 9, Article 5, starting with Section 2540 – Portable Engine and Equipment Registration (PERP)	CARB	Registration under this program is voluntary. Establishes permit process, emission limits based on fleet average, inspection and testing, and other requirements for portable equipment, if registered.
Title 17 of the California Code of Regulations (17 CCR Division 3 starting at Section 60000)	CARB and local APCDs	Establishes framework for air quality planning and regulation.
17 CCR Div 3, Ch 1, Subchapter 7 starting at Section 93000	CARB	Regulations regarding Toxic Air Contaminants in California. Section 93001 incorporates federal Hazardous Air Pollutants into California TAC list.
17 CCR Div 3, Ch 1, Subchapter 7.5, starting at Section 93100	CARB	Describes Airborne Toxic Control Measures.
17 CCR 93105	CARB and APCDs	Air Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations. Surface mining and quarrying requirements are in subsection (f), and include asbestos dust control measures, reporting, monitoring, and record keeping requirements. Subsection (c) provides for a general exemption if a Registered Geologist determines that no serpentine or ultramafic rock is likely to be found.
17 CCR 93114–931116.5	CARB and APCDs	ATCMs for Diesel Fueled Engines – sets limits, compliance schedules, test methods, and other requirements for vehicular and non-vehicular diesel fueled engines.
County – San Luis Obispo County APCD (SLOAPCD)		
Rule 201 – Equipment Not Requiring a Permit	SLOAPCD	Describes those air emissions sources that are exempt from permitting. Some exempt sources are nevertheless subject to prohibitory rules. For instance, road dust is not subject to permit but is limited by Rule 401.
Rule 202 – Permits Required	SLOAPCD	Requires emissions sources that are not exempted by Rule 201 to obtain operating permits from SLOAPCD.

**FINAL EIR OSTER/LAS PILITAS QUARRY
AIR QUALITY**

**TABLE 4.3-5 (CONTINUED)
SUMMARY OF FEDERAL, STATE, AND LOCAL
AIR QUALITY REQUIREMENTS**

Requirement	Administering Agency	Applicability
Rule 219 – Toxics New Source Review	SLOAPCD	Ensures that new sources do not pose excessive health risk to the public by requiring assessment of health risk and application of Toxic Best Available Control Technology (T-BACT) in cases where control is needed to reduce health risk. Applies only if project is required to obtain permit from APCD. Health risk assessment procedures were used in the analysis in this EIR.
Rule 204 – Permit Requirements	SLOAPCD	Contains rule language describing Best Available Control Technology (BACT) and emissions offset requirements for stationary sources.
Rule 401 – Visible Emissions	SLOAPCD	Applies to all activities (with specified exceptions). Limits visibility of fugitive dust to less than No. 1 on the Ringlemann Chart (i.e., 20 percent opacity).
Rule 402 – Nuisance	SLOAPCD	Prohibits discharge of air contaminants from any source (except agricultural operations) that cause nuisance. Odor is not specifically cited, but is considered one type of nuisance.
Rule 403 – Particulate Matter Emission Standards	SLOAPCD	Would not apply to project unless subject to SLOAPCD permitting requirements. Particulate Matter Emissions Standards that affect point sources: <ul style="list-style-type: none"> • 0.1 grains per dry standard cubic foot at standard conditions for stack discharges. • Maximum hourly discharge rate of particulates based upon process weight table in rule. • Internal combustion engines are exempt from this rule.
Rule 412 – Airborne Toxic Control Measures	SLOAPCD	Incorporates ATCMs from 17 CCR into SLOAPCD Rules and Regulations. Applies only if project is subject to APCD permit requirements.
Rule 431 – Stationary Internal Combustion Engines	SLOAPCD	Applies to stationary internal combustion engines rated at more than 50 brake horsepower. Project is not expected to have any such engines.
Rule 601 – New Source Performance Standards	SLOAPCD	Incorporates federal NSPS. Would apply to project only if it is subject to SLOAPCD permitting requirements as an industrial source.

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Dispersion modeling was performed assuming flat terrain. Flat terrain is a conservative assumption for this project because the receptors are generally located at lower elevations than the sources and the emissions points are close to the ground. Thus, plumes will travel along the ground between sources and receptors which is conservatively modeled as flat (i.e., the actual distance is greater with terrain than a straight line and complex terrain promotes vertical mixing).

The health risk assessment calculations are performed using HARP. The ISCST3 software air dispersion output file (χ/Q) is used as the input file for the HARP health risk assessment module. Before inputting the ISCST3 output into HARP it was converted using the HARP ONRAMP software to a format that is compatible with HARP.

The cancer risk assessment is the most sensitive risk assessment for this type of project due to emissions of diesel particulate matter (DPM). Cancer risk is typically assessed over a 70-year lifetime and would include effects from truck travel on public roads adjacent to nearby receptors as well as on-site sources. The multi-year and receptor-centric nature of cancer HRA requires sources in each portion of the site in which equipment will operate. Thus the model contains volume sources that are spaced out over the majority of the operating area on the project site. The area that each volume source covers is used in the apportionment emissions over the site by phase.

The criteria pollutant models contain only on-site sources and evaluate a year, day, or hour. Thus, the criteria pollutant models (and non-cancer HRA models) assume that project sources are operating in Phase 1 of the quarry at the emission rate (potential to emit, or PTE) of the first year (i.e., closest to the receptors and before anticipated regulatory controls are implemented).

The project has a finite amount of material and would operate only 25 years at the peak rate. Furthermore, the Potential to Emit (PTE) will be reduced by existing regulations that have future effective dates. Specifically, air toxic control measures (ATCM) that affect diesel engines will phase in over the next decade to reduce DPM emissions. If the project lifetime lasts longer than 25 years, the amount mined each year would be less postponing throughput until later years when engines are more controlled and emissions/risk is lower than estimated.

Exposure to TACs by routes other than inhalation is included by the multi-pathway risk assessment. Exposure via home grown produce, dermal absorption, soil ingestion, and mother's milk are included. Deposition is assumed to occur at a rate of 0.02 meter per second.

Construction phase activity for this project involves the initial access road building and earliest portions of quarry operations necessary to create the pad area for the scale and scale house and related facilities. Prior to the completion of these facilities, the lack of infrastructure on the site precludes quarrying at the intended production level of 500,000 tons

per year. Therefore, only the operation phase is assessed. Because the project operations involve the same types of heavy equipment, earth and rock movement, and truck traffic that are typical of construction activities, the mitigation measures recommended for the project are drawn more from construction mitigation procedures (SLOAPCD 2012: Sections 2.3.2, 2.3.3 and Section 4.5) rather than from transportation and land use mitigation measures that are more typical of “operations” in land development projects (SLOAPCD 2012: Section 3.8). The mitigation measures that are required for operations are also required during construction.

4.3.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Air Quality within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District; and/or
- b) Expose any sensitive receptor to substantial air pollutant concentrations; and/or
- c) Create or subject individuals to objectionable odors; and/or
- d) Be inconsistent with the District’s Clean Air Plan.

4.3.6 Project Impacts and Mitigation Measures

The discussion of potential air quality impacts requires that a larger number of specific issues be addressed. This is because of the number of different constituents in air pollution, the different sets of regulations and numerical standards that apply to various air pollutants, and the different and sometimes overlapping approaches to mitigating air emissions. For purposes of this EIR, the air quality contaminants and issues will be organized into four broad discussions to reflect the four general significance criteria listed above. For some issues, there are specific numerical thresholds or criteria used by the SLOAPCD to assess impacts and the requirements for mitigation measures. These are presented along with the impacts discussions. The impact discussions are organized as follows:

- Emissions of Criteria Pollutants (AAQS and SLOAPCD Thresholds, criterion a. above):
 - IMPACT AQ-1a: Emissions of ROG+NO_x
 - IMPACT AQ-1b: Emissions of PM₁₀
 - IMPACT AQ-1c: Emissions of Other Criteria Pollutants (CO and SO₂)
- Exposure of Sensitive Receptors to DPM and Other Health Risks (criterion b.)

- IMPACT AQ-2a: Emissions of DPM
- IMPACT AQ-2b: Presence and Disturbance of Naturally Occurring Asbestos
- Creation of Objectionable Odors (criterion c.)
 - IMPACT AQ-3: Creation of Objectionable Odors
- Consistency with SLOAPCD Clean Air Plan (criterion d.)
 - IMPACT AQ-4: Relationship to Clean Air Plan

The Initial Study section on Air Quality also included a fifth criterion related to greenhouse gas (GHG) emission, and identified this as an insignificant impact. The issue of GHG emission is discussed in Section 4.4 of this EIR.

Emissions of ROG+NO_x

Operations at the quarry (at the maximum production rate of 500,000 tons per year, and with assumptions for maximum daily emissions) would generate combined emissions of Reactive Organic Gases (ROG) and nitrogen oxides (NO_x) in excess of the daily SLOAPCD thresholds defining a significant impact for these ozone precursors. The emissions would also exceed the annual threshold, but only by a small amount. These emissions can be reduced through identified mitigation measures. ~~It is likely that the annual ROG+NO_x threshold can be achieved with identified mitigation measures, but it is not certain that daily threshold can be achieved.~~ This impact is, therefore, considered less than significant ~~and not mitigable~~.

The specific issues in this impact discussion correlate to the first significance criteria from the Initial Study – “Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District.” The federal and state AAQS are stated in terms of concentrations measured over specified averaging times, and violations of the AAQS are determined if these concentrations at monitoring stations are exceeded over a number of days per year. As a more easily applied means of assessment, the SLOAPCD has established a series of thresholds based on emission rates, which can be estimated more easily than resulting concentrations. Projects exceeding the stated emissions thresholds in terms of pounds/day or tons/year are considered potentially capable of contributing to violations of a federal or state AAQS.

The thresholds defined by the SLOAPCD (2012: Table 3-2) for determining an impact from emissions of ROG+NO_x are:

- Daily: 25 pounds/day
- Annual: 25 tons/year

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The project operational emissions of ROG+NO_x were estimated by Sespe Consultants (see Appendix B of the Sespe Consultants report in Appendix D of this EIR), and are summarized in Table 4.3-6 below.

**TABLE 4.3-6
SUMMARY OF ROG+NO_x EMISSIONS**

Source	Unmitigated Annual Emissions (Tons/Year)	Mitigated Annual Emissions	Unmitigated Daily Emissions (Pounds/Day)	Mitigated Daily Emissions (Pounds/Day)
Blasting	2.6	2.6	255.0	255.0
Non-road engines	10.5	7.9	238.5	181.0
Trucks running on-site	0.5	0.5	8.6	8.6
Trucks idling on-site	0.3	0.3	4.3	4.3
Subtotal on-site	13.8	11.3	506.4	448.9
Trucks off-site	25.1	25.1	201.3	201.3
Passenger Vehicles	0.1	0.1	0.4	0.4
Subtotal off-site	25.2	25.2	201.7	201.7
Total	38.9	36.4	708.1	650.6
Total without Blasting	36.4	33.8	453.1	365.6
SLOAPCD Threshold	25	25	25	25

Review of Table 4.3-6 shows that without mitigation the maximum annual emissions of ROG+NO_x would exceed the SLOAPCD threshold of 25 tons/year, but not by a very large amount. The peak daily emissions, however, would be much higher than the 25 pounds/day limit. A large fraction of the peak daily emissions are attributed to blasting, which is expected to occur only one or two days per month, or a maximum of 20 days per year. Even without blasting, however, the daily limit would still be exceeded. The other major sources of ROG+NO_x emissions are the on-highway truck traffic associated with aggregate material deliveries, and the non-road engines. These are in the heavy equipment involved in the quarry operations and in moving and loading aggregate material, and also include the engine associated with the portable rock crushing and sorting equipment that would be brought onto the site for that purpose approximately eight weeks per year.

Mitigation measures for this type of heavy equipment are described as Best Available Control Technology (BACT) for construction operations by SLOAPCD CEQA Air Quality Handbook SLOAPCD (2012: Section 2.3.2) and include the following:

- Further reducing emissions by expanding use of Tier 3 and Tier 4 off-road and 2010 on-road compliant engines.

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- Repowering equipment with the cleanest engines available.
- Installing California Verified Diesel Emission Control Strategies. These strategies are listed at: <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>.

The referenced list of Verified Diesel Emission Control Strategies includes several dozen manufacturers and equipment references, most of which are for diesel exhaust particulate filters that are important for other mitigation measures but will not help to reduce NO_x. There are some NO_x reducing catalytic systems that are suitable for rubber-tired off road use, and these may be applicable to the two front end loaders that would be used in the project operations. These measures, along with a restriction on idling trucks (now required by law) and the use of model year 2007 or newer trucks, have been assumed for purposes of estimating the mitigated emissions in Table 4.3-6.

~~With the mitigation measures described above, ROG+NO_x emissions will be reduced, but not to levels below either the annual (25 tons/year) or daily (25 pounds/day) thresholds established by SLOAPCD.~~

~~If operational mitigation measures cannot reduce emissions of ROG+NO_x below the applicable thresholds, then additional mitigation is necessary.~~ The SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2012: Table 3-5) provides a very extensive list of possible mitigation measures, addressing site design, energy efficiency, and transportation. Most of these measures are oriented towards residential land development projects. For projects that would generate in excess of 50 pounds/day of ROG+NO_x, all feasible mitigation measures from the SLOAPCD list should be implemented (SLOAPCD 2012: Section 3.8.1 c.). Site planning and other provisions intended to minimize energy consumption and to minimize the use of portable combustion engines in routine landscape and other maintenance procedures are applicable to this project. These measures may provide some benefit in reducing NO_x emissions, ~~but they are not expected to reduce the impact of the project substantially.~~

~~Examples of additional~~ Additional measures to reduce construction equipment emissions are described in the SLOAPCD CEQA Air Quality Handbook as Construction Activity Management Plan (CAMP) Guidelines (SLOAPCD 2012: Section 4.5). As appropriate, these types of measures will be incorporated into a comprehensive “Activities Management Plan” (AMP). ~~Even though the CAMP guidelines apply to construction related impacts, since the equipment and operations are similar to what is proposed it is reasonable to consider them for the operational phase of this project.~~ The selection and combination of these available mitigation measures must be made in consultation with the SLOAPCD.

Based on a review of the sources within the project, the most effective mitigation measure to reduce NO_x production, beyond those described above, would involve electrification of heavy equipment. While not practical for the mobile equipment on-site, the portable aggregate processing equipment could be operated by grid-supplied electrical power rather

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than by diesel engines or generators. This measure would require the provision of electrical service at the site beyond what is normally available in rural lands areas. If installed, this power source would only be used several times per year, which would reduce its cost effectiveness. Since its feasibility is unknown, this measure is not included within this EIR but it may be considered later in consultation with SLOAPCD.

Other possibilities for on-site mitigation include a severe restriction on the number of heavy equipment pieces that could operate simultaneously. Depending on the production rate at the quarry, this type of limitation may be feasible at least in the early stages of its operation. At the anticipated production of 500,000 tons per year, however, the full inventory of project equipment presented in Section 2.3.2 of this EIR is expected to be in use. The use of alternative fuel, such as compressed natural gas, or other measures may also be possible, but these would have to be developed by the applicant and accepted by the SLOAPCD.

For operational impacts, off-site mitigation measures to reduce regional ROG+NO_x emissions are required if the annual emissions exceed 25 tons/year, which is the case for this project (SLOAPCD 2012: Section 3.8.3). The same section of the SLOAPCD Handbook also states:

Whenever off-site mitigation measures are deemed necessary, it is important that the developer, lead agency and APCD work together to develop and implement the measures to ensure successful outcome. This work should begin at least six months prior to issuance of occupancy permits for the project.

The applicant and the San Luis Obispo County Air Pollution Control District have agreed that the project will implement offsite mitigation measures as presented in Mitigation Measure AQ-1a.

~~If they are deemed necessary, then the off-site mitigation measures should be developed and agreed upon by the applicant, SLOAPCD, other affected parties, and the County Planning and Building Department prior to the start of construction (SLOAPCD 2012: page 3-21). Such off site mitigation measures may take the form of specific emissions reductions achieved through retrofit activities to improve energy efficiency, improvements or funding to increase the use of transit or alternative transportation, or similar measures reviewed and approved by the SLOAPCD. The Handbook also states (SLOAPCD 2012: pages 3-20 and 3-21) the following:~~

~~If off site mitigation is required, potential off site mitigation measures may be proposed and implemented by the project proponent following APCD approval of the appropriateness and effectiveness of the proposed measure(s). Alternatively, the project proponent can pay a mitigation fee based on the amount of emission reductions needed to bring the project impacts below the applicable significance~~

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~~threshold. The APCD shall use these funds to implement a mitigation program to achieve the required reductions.~~

~~A preliminary estimate of the approximate cost of achieving the 25 pounds/day threshold, using the procedures outlined by SLOAPCD (2012: Section 3.8.3) and assuming only the on-site mitigation measures applied to the project in this EIR, indicates that the approximate cost of achieving the threshold would range from 30 to 50 cents per ton of aggregate produced over the 25 year lifetime of the project. The range reflects the inclusion or exclusion of blasting emissions, and there are different justifications for each approach. The economic effect of this additional cost is not clear, and it may depend on whether or not similar air emissions charges are imposed either directly or indirectly on other aggregate sources. The details of this type of analysis and the determination of specific emission reduction measures and costs are matters for consultation between the applicant and the SLOAPCD. At this time, it is assumed that the additional mitigation measures beyond those typical measures associated with quarry projects (identified in the Sespe Consultants report contained in Appendix D of this EIR) would not be implemented. Prior to operations at the quarry site, the applicant and the SLOAPCD may come to an agreement on additional mitigation measures that have the potential to reduce air quality impacts.~~

In summary, the maximum daily emissions of ROG+NO_x from the project would occur during time when blasting and portable aggregate processing equipment would add to the pollutants generated by other on-site equipment and on-highway truck use. These emissions would exceed the SLOAPCD daily threshold for these ozone precursors by a substantial amount. The emissions can be reduced by the specified mitigation measures, and additional mitigation can be developed in consultation with the SLOAPCD. It is preferable that mitigation be achieved through actual on-site reductions of emissions or through off-site reductions achieved generally in the project vicinity or region. An acceptable and feasible option includes achieving part of the emissions reductions through funding current programs and efforts administered by the SLOAPCD. ~~Based on the analysis in this EIR, it appears that it may be possible to develop~~ According to Gary Arcemont, Air Quality Specialist for the SLOAPCD, the applicant has agreed to incorporate additional measures into the project in consultation with SLOAPCD that would be capable of mitigating air quality impacts related to ROG+NO_x, reducing annual emissions to below the 25 tons/year threshold. It is much more problematic, however, to identify measures that would be capable of reducing the peak daily emissions below the 25 pounds/day threshold. For this reason, the ROG+NO_x emissions of the project are considered to be a less than significant and ~~not mitigable~~ impact.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-1a: Emissions of ROG+NO _x . Operations at the quarry at the planned	MM AQ-1a: Emissions of ROG+NO _x . Prior to issuance of a Notice to Proceed for the first phase of the quarry operation, the applicant or quarry operator shall provide evidence to the	Significant and not mitigable <u>Less than</u>

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Description of Impact	Mitigation Measure	Residual Impact
<p>production rate of 500,000 tons per year would generate combined emissions of Reactive Organic Gases (ROG) and nitrogen oxides (NO_x) in excess of the daily and annual SLOAPCD thresholds defining a significant impact for these ozone precursors.</p>	<p>Department of Planning and Building that an acceptable set of measures to reduce ROG+NO_x emissions has been approved by the SLOAPCD. The Quarry operator shall comply with the following on-site requirements for this project to minimize ROG+NO_x emissions, or achieve equivalent reductions through measures approved by the SLOAPCD:</p> <ol style="list-style-type: none"> 1. Blasting shall not be conducted on days when portable aggregate processing equipment is in operation. 2. On and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit. 3. If not required by other regulations (CARB on-road or off-road diesel requirements), transport operations conducted by the quarry operator shall be restricted to trucks with 2007 model year engines or newer trucks. 4. Use Best Available Control Technology (BACT) measures for construction activities as follows: <ul style="list-style-type: none"> • Further reducing emissions by expanding use of Tier 3 and Tier 4 off-road and 2010 on-road compliant engines; • Repowering equipment with the cleanest engines available; and • Installing California Verified Diesel Emission Control Strategies. These strategies are listed at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm 5. If the combination of these requirements does not meet the standard of 25 pounds per day of ROG+NO_x, then the applicant or quarry operator shall comply with a combination of certain off-site requirements presented in Section 3.8.3 of the "CEQA Air Quality Handbook (April 2012)" prepared by the SLOAPCD, and/or additional measures in a Construction Activities Management Plan (CAMP) described in Section 4.5 of the same Handbook, to achieve this standard to the satisfaction of the SLOAPCD. This requirement may include funding and implementation of off-site mitigation measures consistent with the existing SLOAPCD program described in Section 3.8.3 of the same Handbook. 5. <u>Prior to issuance of a Notice to Proceed for the first phase of the quarry operation, the applicant or quarry operator shall prepurchase off-site ROG + NO_x mitigation from the SLOAPCD, as outlined in the approved Activity Management Plan (AMP) and based on the then-in-place pricing under the Carl Moyer Grant Program. Thereafter, the project operator shall report to the SLOAPCD as stated in the approved AMP. If applicant determines on-road diesel truck engine model years are not available and/or cannot be verified, applicant</u> 	<p><u>significant</u></p>

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Description of Impact	Mitigation Measure	Residual Impact
	<p><u>agrees to use the San Luis Obispo County on-road diesel truck fleet average emission factor and a total count of truck trips. SLOAPCD shall then utilize this information to invoice the project operator in accordance with its off-site mitigation program any emissions deemed to exceed APCD thresholds during the reporting period. Copies of all reports, invoices, and payments under this program shall be provided to the Department of Planning and Building for verification and audit.</u></p> <p>6. <u>The Activity Management Plan (AMP) shall include, but not be limited to the following elements:</u></p> <ul style="list-style-type: none"> a. <u>General project phase schedule and a description of activities and all project generated emissions, including vehicle haul trips, blasting, recycling, off-road vehicle activity and diesel equipment.</u> b. <u>Description of mitigation measures, including all equipment emission reduction measures.</u> c. <u>A timeline for submittal of quarterly reports.</u> d. <u>A section describing contents of quarterly reports. Include a description of the tracking mechanism to ensure the truck engine model year is as stated in the AMP. Describe the use of the weigh scale software in tracking vehicle trips. Include the contact person(s) responsible for monitoring. Provide phone, email and mailing address of responsible contact person.</u> <p>7. <u>The quarterly reports shall include, but not be limited to the following elements:</u></p> <ul style="list-style-type: none"> a. <u>Tabulation of on and off-road equipment used during the reporting period (age/model year, horsepower, engine tier, miles and/or hours of operation).</u> b. <u>Tabulation of on-road truck trips and hours of use for off-road equipment, blasting activity.</u> 	

Emissions of PM₁₀ Fugitive Dust

Operations at the quarry at a production rate of 500,000 tons per year would generate emissions of PM₁₀ fugitive dust in excess of the daily SLOAPCD thresholds defining a significant impact for this criteria pollutant. The fugitive dust emissions would not exceed the annual threshold, and daily emissions can be reduced through identified mitigation measures, ~~but not to a less than significant level based on the analysis in this EIR. Additional mitigation measures must be selected and developed through consultation with SLOAPCD, and off site mitigation measures consistent with existing SLOAPCD programs may be necessary. Even with additional mitigation measures, it is not certain that the daily threshold~~

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~~would be met during peak activity days at the project. This impact is, therefore, considered significant and unmitigable.~~

This issue is the second of three that are grouped within the first criteria used in the Initial Study, dealing with the potential to contribute towards the exceedance of an AAQS or other adopted air quality threshold. As with ROG+NO_x, this issue is analyzed by comparing estimated project PM₁₀ and fugitive dust emissions with thresholds used by the SLOAPCD. The thresholds defined by the SLOAPCD (2012: Table 3-2) for determining an impact from emissions PM₁₀ and fugitive dust are:

- Daily: 25 pounds/day
- Annual: 25 tons/year

The project operational emissions of PM₁₀ were estimated by Sespe Consultants (see Appendix B of the Sespe Consultants report in Appendix D of this EIR), and are summarized in Table 4.3-7 below.

Review of Table 4.3-7 shows that although the annual emissions of PM₁₀ would remain well below the SLOAPCD threshold of 25 tons/year, the maximum daily emissions would be higher than the 25 pounds/day limit. PM₁₀ emissions would originate primarily from loading activities, the portable aggregate plant during times when it is operating, truck traffic, and to a lesser extent from blasting and other quarry activities. Even without the aggregate plant operating, however, the estimated daily emissions of PM₁₀ would still exceed the SLOAPCD threshold of 25 pounds per day.

Some of the mitigation measures described above in AQ-1a will also help to reduce dust and particulate emissions, and the SLOAPCD consultation process for those measures will also serve to help refine and apply the mitigation measures listed below for PM₁₀ and fugitive dust. The SLOAPCD (2012: Section 2.4) describes a total of 19 mitigation measures designed to reduce fugitive dust emissions from construction activities, ~~most of which are also mentioned in the CAMP guidelines (SLOAPCD 2012: Section 4.5). Since the proposed quarry operations will have characteristics similar to construction activities, the mitigation measures identified for this project have been modified from these SLOAPCD lists, even if a formal CAMP is not required.~~ The organization and monitoring procedures described in the mitigation measures below follow the pattern of a ~~CAMP with the involvement of the SLOAPCD procedures~~ to help ensure implementation consistent with ~~their authority under~~ Rules 401 and 402, related to control of visible emissions and nuisances, respectively.

In describing mitigation measures contained within a CAMP, SLOAPCD (2012: page 4-12) emphasizes tailoring the measures “...to provide adequate protection to any nearby sensitive receptors.” For the proposed quarry project, the nearest residences outside of the subject property itself are located over 1,000 feet away from the quarry boundaries. The distance

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**TABLE 4.3-7
SUMMARY OF PM₁₀ EMISSIONS**

Source	Unmitigated Annual Emissions (Tons/Year)	Mitigated Annual Emissions (Tons/Year)	Unmitigated Daily Emissions (Pounds/Day)	Mitigated Daily Emissions (Pounds/Day)
Aggregate plant	1.0	1.0	19.7	19.7
Recycle Plant	0.1	0.1	4.7	4.7
Unpaved road dust	2.0	0.25	18.2	2.3
Paved Road Dust	3.2	0.21	26.1	1.7
Reclamation	0.1	0.1	3.0	3.0
Ripping	0.3	0.3	8.8	8.8
Load/unloading	0.9	0.9	18.3	18.3
Blasting	0.1	0.1	7.3	7.3
Non-road engines	0.35	0.18	8.1	4.3
Trucks running on-site	0.2	0.2	0.3	0.3
Trucks idling on-site	0.0	0.0	0.0	0.0
Subtotal on-site	8.0	3.1	114.1	70.4
Trucks off-site	1.0	1.0	8.0	8.0
Passenger Vehicles	0.0	0.0	0.0	0.0
Paved Road Dust	6.2	6.2	49.9	49.9
Subtotal off-site	7.2	7.2	57.9	57.9
Total	15.2	10.4	172.3	128.3
Total without Blasting	15.2	10.3	165.0	121.0
SLOAPCD Threshold	25	25	25	25

from the construction site for the project access road is about 830 feet and 1,300 feet to the two closest residential locations. The processing and staging area for the quarry would be located north of the proposed scale and scale house location, approximately 1,400 feet and 1,500 feet from the nearest two residential locations outside of the project property. The nearest school is Santa Margarita Elementary School, located over two miles to the southwest.

In order to achieve the SLOAPCD threshold of 25 pounds/day, it would be necessary to control virtually all of the fugitive dust from both the loading operations and the aggregate processing operations when they occur, plus improve the control on other sources through the mitigation measures as listed. The nature of the material in the proposed quarry (granitic rock with very little silt and sand) is such that it may be possible to achieve this degree of control. As with ROG+NO_x, additional mitigation measures have been ~~may be~~ required for the control of fugitive dust and PM₁₀, ~~and these can be developed~~ in consultation with the

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SLOAPCD. Since the applicant and the SLOAPCD have ~~not~~ reached a formal agreement regarding mitigation associated with fugitive dust and PM₁₀, impacts are considered less than significant and not mitigable for the daily threshold of fugitive dust and PM₁₀ and less than significant for the annual threshold.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT AQ-1b: Emissions of PM₁₀ Fugitive Dust. Operations at the quarry at a production rate of 500,000 tons per year would generate emissions of PM₁₀ fugitive dust in excess of the daily SLOAPCD thresholds defining a significant impact for this criteria pollutant. The fugitive dust emissions would not exceed the annual threshold.</p>	<p>MM AQ-1b: Emissions of PM₁₀ Fugitive Dust. <u>In addition to compliance with MM AQ-1a, the Quarry operator shall</u> The Quarry operator comply with the following on-site requirements for this project to minimize PM₁₀ fugitive dust emissions:</p> <ol style="list-style-type: none"> 1. Reduce the amount of disturbed area where possible, by retaining the natural vegetation and soil within each quarry phase until that phase is ready to start. 2. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. 3. All soil or product stockpile areas should be sprayed daily as needed, or be covered or treated to minimize windblown dust. 4. The project access drive should be completed and paved prior to the start of quarry operations and the operation of heavy trucks on the property for aggregate sales purposes. 5. Locations for stockpiles and material storage areas, along with specifications for dust control measures, shall be shown on all applicable construction and mining plans. 6. The quarry operator shall designate a person to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and phone number of such person shall be provided to the SLOAPCD prior to issuance of Notice to Proceed or other permit to initiate work on the project. 7. Reclamation and revegetation of all disturbed areas shall occur as soon as practicable in a phased manner consistent with the project plans. Watering or other treatments shall be used on replaced soil material to control windblown dust until vegetation is established. 8. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD. 9. Vehicle speed for all quarry vehicles and trucks on unpaved portions of the operations area shall not exceed 15 mph. 10. All trucks hauling dirt, sand, soil, or other loose materials are to be covered, fitted with appropriate seals and splash guards, and must 	<p>Significant and not mitigated Less than significant</p>

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Description of Impact	Mitigation Measure	Residual Impact
	<p>be operated in conformance with California Vehicle Code 23114 related to hauling materials.</p> <p>11. Sweep streets at the end of each day if visible soil material is carried onto the project access road. Water sweepers with reclaimed water should be used where feasible.</p> <p>12. Prior to commencement of any construction activities (e.g., site preparation, grading or construction activities) the applicant will notify the County Department of Planning and Building and the SLOAPCD, by letter, of the status of the air quality measures outlined above. The letter will state the following:</p> <ul style="list-style-type: none"> a) The controls that will be implemented; b) The reasons why any unimplemented measures are considered infeasible and the measures incorporated to substitute for these measures; and c) When scheduled construction activities will be initiated to allow for SLOAPCD inspection of the mitigation measures. <p>13. <u>At all times during construction and operation of the quarry, the operator shall prevent visible emissions in excess of the limits prescribed in SLOAPCD Rule 401 and avoid causing any nuisance as prohibited in Rule 402.</u></p>	

Emissions of Other Criteria Pollutants (CO and SO₂)

The project will result in emissions of carbon monoxide (CO) and small amounts of sulfur dioxide (SO₂). These emissions are not expected to accumulate or to cause exceedances of any AAQS. These emissions are expected to be less than significant and no mitigation measures, beyond those required for other pollutants, are necessary.

These constituents are the third issue evaluated under the first Initial Study criteria related to contributing towards an exceedance of an AAQS or SLOAPCD adopted emission threshold. The SLOAPCD has no annual threshold for CO, and the daily threshold is 550 pounds/day. Emissions from normal quarrying activities, including the periodic operation of the aggregate processing plant and all on-highway truck traffic, as well as the other on-site equipment, will amount to 360 pounds/day [see Appendix C of the SESPE Report, which is Appendix D in this EIR]. The mitigation measures described above for other pollutants will have a very small effect in reducing this.

Blasting operations, which are expected to occur up to 20 times per year, will generate a larger mass of CO – estimated at 1,005 pounds/day when blasting occurs. The CO, however, will not be released instantaneously since it will be generated underground in the volume of rock containing the bore holes when the blast occurs. Over time, as rock material is removed by excavation in the quarry, the CO will be dissipated. The isolated nature of the proposed

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quarry, with distances to the nearest off-site residences in excess of 1,000 feet, will prevent the accumulation of CO at significant concentrations. Since the generation of CO will not occur in a confined or semi-confined space, and for the reasons discussed above, CO modeling was not conducted as a part of this evaluation.

The SLOAPCD CEQA Handbook states (SLOAPCD 2012: Section 3.5.5):

Projects which emit more than 550 lbs/day of carbon monoxide (CO) and occur in a confined or semi-confined space (e.g., parking garage or enclosed indoor stadium) must be modeled to determine their significance. In confined or semi-confined spaces where vehicle activity occurs, CO modeling is required.

As a general practice, CO concentrations are of concern at high volume roadway intersections that operate at a very congested level of service, or in association with confined areas such as tunnels or parking garages as noted above. Neither of those conditions is associated with the proposed project. While the CO emissions are estimated to be 1,005 pounds/day when blasting occurs, the location of these activities and the characteristics discussed above related to release of CO in mining operations result in CO emissions from blasting that are less than significant.

The SLOAPCD (2012: Table 3-2) does not provide any standards for SO₂ emissions, and this pollutant is not discussed in the SLOAPCD CEQA Handbook other than its listing in the table of AAQS. Federal and state regulations have already been established to reduce the sulfur content of diesel fuel. This pollutant has not been considered a problem in the County. For these reasons, SO₂ emissions will not represent a significant impact and no mitigation is necessary.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-1c: Emissions of Other Criteria Pollutants (CO and SO₂). The project will result in emissions of carbon monoxide (CO) and small amounts of sulfur dioxide (SO ₂) which will not accumulate or cause exceedances of any AAQS.	MM AQ-1c: Emissions of Other Criteria Pollutants (CO and SO₂). Since this effect is less than significant, no mitigation is required.	Less than significant

Emissions of DPM

The project operations will emit diesel particulate matter (DPM) above the SLOAPCD threshold. Modeling of the long term carcinogenic effects of DPM, and other carcinogens that may be released in small amounts, indicate that the increase in potential cancer risk may be higher than the SLOAPCD health risk threshold. Mitigation measures to reduce ROG+NO_x emissions (found in Mitigation AQ-1a) will also minimize potential DPM

emissions, and will reduce the potential cancer risk below the applicable threshold. This is considered a potential significant impact that can be mitigated.

This issue, which also includes an assessment of other potential acute and chronic health effects, is the first of two issues related to criteria b. in the Initial Study – exposure of any sensitive receptor to substantial air pollutant concentrations. The focus of this discussion is on DPM, since that is the most important potential toxic air contaminant associated with this project; and indeed, it is one of the most important TACs present in urban and suburban areas. As noted above in Section 4.3.1, DPM accounts for about 70 percent of the cancer risk in urban areas. For this reason, there has been intensive development of regulations over the last 10 years to regulate the composition of diesel fuel, to reduce the formation of soot and other particulates in diesel engines, and to control their emissions in diesel exhaust.

Thresholds used by SLOAPCD to evaluate DPM, and related potential health risks, are summarized as follows:

- Daily Threshold: 1.25 pounds/day (SLOAPCD 2012: Table 3-2)

The SLOAPCD CEQA Handbook then states (SLOAPCD 2012: Section 3.5.3):

Projects that emit more than 1.25 lbs/day of DPM need to implement on-site Best Available Control Technology measures. If sensitive receptors are within 1,000 feet of the project site, a Health Risk Assessment (HRA) may also be required.

Project emissions of DPM were calculated by Sespe Consultants (see Appendix C, page 3, in the Sespe Consultants report, which is Appendix D of this EIR), and are summarized below in Table 4.3-8 below. Unmitigated DPM emissions would exceed the daily threshold, and thus would require preparation of an HRA. With mitigation measures in place (the same mitigation measures outlined in AQ-1a), the 25 year average daily emissions are still higher than the daily threshold, so an HRA was prepared following procedures described by SLOAPCD. For this project, the geographic extent of the HRA was also extended beyond the 1,000 receptor distance to include a second receptor grid in the village area of Santa Margarita, which is about three miles to the southwest along the proposed truck route.

In preparing the health risk assessment, Sespe Consultants considered DPM, and other potential toxic air contaminants which are components of fugitive dust associated with the project (including silica and metals such as cadmium and chromium that are natural constituents of rocks and soils). Sources for these contaminants included the on-road operation of the project heavy trucks in the vicinity and along the proposed truck route as well as the emissions from within the quarry itself. Sespe Consultants prepared separate risk assessments evaluating the potential acute (short term) and chronic (long term) non-carcinogenic effects, and also the long-term carcinogenic effects of these constituents. The acute and chronic non-cancer effects were found to be less than applicable thresholds.

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**TABLE 4.3-8
SUMMARY OF DPM EMISSIONS**

Source	Unmitigated DPM (Pounds/Day)			Mitigated DPM (Pounds/Day)		
	First Year	25 Year Average	70 Year Average	First Year	25 Year Average	70 Year Average
Non-road engines	8.05	0.66	0.40	4.34	0.43	0.25
Trucks-running	0.32	0.05	0.04	0.32	0.05	0.04
Trucks-idling	0.04	0.01	0.01	0.04	0.01	0.01
Subtotal on-site	8.42	0.72	0.45	4.66	0.49	0.29
Off-site trucks	7.97	2.92	2.76	7.97	2.92	2.76
Total	16.39	3.64	3.2	12.63	3.41	3.05
Threshold	1.25	1.25	1.25	1.25	1.25	1.25

The most sensitive or conservative (i.e., the highest risk) analysis, was found to be that associated with potential cancer risk. The health risk assessment assumes potential exposure at several nearby residences (the receptors AQ-1 through AQ-8, described in Table 4.3-3 and shown in Figure 4.3-1), and accounts for multiple path exposure (e.g., inhalation of airborne dust, consumption of garden vegetables, and other pathways) over the lifetime of the project (25 years). Additional receptor points for the health risk assessment were established in a second grid in Santa Margarita to evaluate the effects of heavy truck emissions. The applicable threshold for considering the excess cancer risk results used by SLOAPCD is 10 in one million (SLOAPCD 2012: Section 3.6.1). The results for the cancer health risk assessment are summarized below in Table 4.3-9 (updated from the Draft EIR to reflect Table 13 in the Sespe Report presented in Appendix D of this EIR).

A review of the results presented in Table 4.3-9 shows that in the absence of mitigation, there would be an increase in potential cancer risk in excess of the 10 in one million threshold at three residences (AQR-6, AQR-7 and AQR-8). These residences are located generally south and southwest of the project site. With the assumed mitigation measures (as outlined in Mitigation AQ-1a), the emissions of DMP would be reduced to the point that it would be below 10 at all of the modeled locations.

The results also indicate that at the worst case point in the community of Santa Margarita, the potential cancer risk would be 1.9 in one million. Additional information regarding the cancer risk results is in the Sespe Consulting Inc. report, which is Appendix D of this EIR (specifically in Figure 9 in Appendix A of the Sespe report.) As a reference, recall from Section 4.3.1 that risk maps prepared by CARB indicate that the remote areas in San Luis Obispo County experience current cancer risk rates between 0 and 50, and in the population centers of the County the risk rate is from 50 to 100 per one million.

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**TABLE 4.3-9
CANCER RISK**

Parameter	SM ¹	AQR-1	AQR-2	AQR-3	AQR-4	AQR-5	AQR-6	AQR-7	AQR-8
Unmitigated cancer risk ²	1.9	<u>4.66</u> 5.82	<u>4.84</u> 4.11	<u>0.87</u> 0.9	<u>6.0</u> 5.8	<u>0.92</u> 0.8	<u>9.3</u> 14.9	<u>17.3</u> 24	<u>8.67</u> 10.4
Threshold ²	10	10	10	10	10	10	10	10	10
Significant without mitigation?	No	No	No	No	No	No	<u>No</u> Yes	Yes	Yes
Mitigated cancer risk	1.9	<u>2.6</u> 2.9	<u>2.6</u> 1.9	<u>0.50</u> 0.4	<u>2.8</u> 2.4	<u>0.53</u> 0.4	<u>5.1</u> 6.2	<u>8.6</u> 9.5	<u>5.5</u> 5.3
Significant after mitigation?	No	No	No	No	No	No	No	No	No

¹ Worst-case point in the Santa Margarita village area.

² Excess cancer cases per million people exposed.

In summary, project emissions of DPM associated with the on-site equipment operations and the off-site heavy truck operation in the vicinity, have the potential to exceed the applicable standards used by the SLOAPCD. This is true with respect to the daily limits suggested directly for DPM and for the associated cancer risk potential associated with DPM and other trace carcinogens that may be released. The mitigation measures assumed for the project to control NO_x and PM₁₀ emissions from diesel engine exhaust would also reduce the emissions of DPM and the associated cancer risk to a level that is consistent with the health risk standard used by the SLOAPCD. Any additional mitigation measures developed in consultation with SLOAPCD to reduce criteria pollutants further may also further reduce the potential cancer risk from the project. This impact is potentially significant, but mitigable.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-2a: Emissions of DPM. The project operations will emit diesel particulate matter (DPM) above the daily SLOAPCD threshold. Modeling of the long term carcinogenic effects of DPM, and other carcinogens that may be released in small amounts, indicate that the unmitigated increase in potential cancer risk may be higher than the SLOAPCD health risk threshold.	MM AQ-2a: Emissions of DPM. Mitigation Measure AQ-1a serves as adequate mitigation for Impact AQ-2a.	Less than significant

Naturally Occurring Asbestos

The project will involve grading and soil removal and quarrying of the underlying rock. If Naturally Occurring Asbestos (NOA) were present, it could be disturbed and emitted into the air where it could expose workers or nearby residents to this toxic air contaminant. This is considered a potential significant impact that is mitigated through compliance with the CARB Air Toxic Control Measure related to NOA.

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This issue is the second item to be discussed regarding the possibility for exposure of sensitive receptors to substantial air pollutant concentrations, or criteria b. used in the Initial Study. In this case, the sensitive receptors of most concern would be workers at the quarry site who would be the most directly exposed to dust and potentially occurring NOA at the operations.

The CARB Air Toxic Control Measure for NOA is found at 17 CCR 93105. Subsection (f) describes the asbestos dust control measures, reporting, monitoring, record keeping and other requirements that apply to surface mines and quarries where NOA is present. The Oster/Las Pilitas Quarry site, however, is within the La Panza Granitics geologic area. The rock types present are granitic. NOA is typically associated with ultramafic or serpentine rock, and is not likely to be found at the project site. The SLOAPCD has a review and exemption process that can confirm the absence of NOA, and thus avoid the need for special dust control and other activities. In the event that NOA may be present, then additional requirements would be imposed by the SLOAPCD including, but not limited to:

- a. Development of an Asbestos Dust Mitigation Plan which must be approved by the SLOAPCD before operations begin
- b. Development and approval of an Asbestos Health and Safety Program (required for some projects)

Thus, the possibility of NOA at the project site is considered a potential significant impact, which can be mitigated through compliance with the existing ATCM and SLOAPCD procedures. NOA is not expected to occur with the area of disturbance associated with the proposed project. If the applicant does not receive an exemption from the SLOAPCD, then the measures contained in the Asbestos Dust Mitigation Plan will reduce potential impacts associated with NOA to a less than significant level.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-2b: Naturally Occurring Asbestos (NOA). The project will involve grading and soil removal and quarrying of the underlying rock. If NOA were present, it could be disturbed and emitted into the air where it could expose workers or nearby residents to this toxic air contaminant.	MM AQ-2b: Naturally Occurring Asbestos (NOA). Prior to the issuance of the Notice to Proceed or related permit to start construction on the project, the quarry operator shall submit evidence to the Department of Planning and Building, that either an exemption has been granted by the SLOAPCD, or the provisions of the CARB Air Toxic Control Measure related to NOA have been implemented.	Less than Significant

Creation of Objectionable Odors

The project proposes to mine granitic rock and produce aggregate products for sale. The project will also accept and process “Type A” inert debris, consisting of Portland Cement Concrete and Asphaltic Concrete, to produce recycled material for use in roadway

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construction. These materials and activities are not expected to generate substantial odors detectable outside the project boundaries. This potential effect is considered less than significant and no special mitigation is necessary.

This effect correlates to the third significance criterion (c) in the Initial Study, related to creating or subjecting individuals to objectionable odors. During the public and agency scoping period for the preparation of this EIR, concern was expressed by some residents that the project would produce odors from the manufacture of Asphaltic Concrete (AC), which is done in a “hot plant” by melting asphalt (also called bitumen) and mixing sand and gravel in it to create hot and fluid concrete. Although such a facility was originally proposed as part of the project, and is a common ancillary use associated with aggregate quarries, the applicant withdrew that portion of the project. A hot plant is not part of the project, and therefore will not be present to cause any objectionable odors.

A second concern was raised about the possible release of organic material from recycled PCC or AC pavement brought to the project site for stockpiling, processing, and transport to road construction sites. As proposed, and as described in Section 2.3.1 of this EIR, this material will be limited to “Type A” inert waste. This material may include “fully cured asphalt” which is defined as asphalt that is at ambient temperature, is substantially hardened and is inelastic. Typically, broken AC pavement contains only about 3 to 7 percent asphalt and the rest of its bulk is sand and gravel aggregate. The “Type A” inert waste specifications also prohibit “...soluble pollutants at concentrations in excess of water quality objectives.” The regulations governing the “Type A” inert waste processing facility as proposed include limits on storage times and other provisions intended to minimize the potential for such an operation to cause a nuisance. In addition, enforcement of the regulations against causing a nuisance can be carried out by the SLOAPCD as well as by the state Enforcement Agency (Cal Recycle) responsible for overseeing compliance of the recycling operation with state regulations.

Thus, due to the elimination of the hot plant from the project proposal, and the limitation of recyclable materials to “Type A” inert wastes, the project is not expected to produce objectionable odors. Prohibitions against causing a nuisance are included both in the SLOAPCD Rules and Regulations (Rule 402), and in the County Code (Section 27.74.150). Enforcement of permit conditions and anti-nuisance provisions by both local and state agencies will help to ensure that objectionable odors are not produced. The potential to produce objectionable odors is considered a less than significant impact, and no special mitigation measures are considered necessary, beyond general permit conditions that will prohibit nuisance activities.

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Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-3: Creation of Objectionable Odors. The project proposes to mine granitic rock and produce aggregate products for sale. The project will also accept and process "Type A" inert debris, consisting of Portland Cement Concrete and Asphaltic Concrete, to produce recycled material for use in roadway construction.	MM AQ-3: Creation of Objectionable Odors. Since this effect is less than significant, no mitigation is required.	Less than Significant

Consistency with Clean Air Plan

The project will help to provide aggregate construction material within the local market area. It involves activity and the generation of truck traffic that is consistent with regional growth forecasts and traffic modeling used in air quality planning, and the project is not growth inducing. Therefore, it is consistent with the Clean Air Plan and its effects in this regard are considered less than significant.

This issue correlates to the final significance criterion (d) used in the Initial Study.

The Clean Air Plan was published by the San Luis Obispo County Air Pollution Control District in 2001. The Plan contains required control measures to attain/maintain air quality; a majority of which have already been undertaken. The Clean Air Plan does not specifically address quarries, aggregate processing, or recycling plants. The Transportation and Land Use Chapter of the Clean Air Plan contains one measure "L-1, Planning Compact Communities" that states "spread out communities require longer travel distances between home, work, school, and shopping. In general, the more compact a community is, the lower its number of vehicle trips and miles traveled." Though the control measure is in the context of commuter trips, the haul of aggregate is similarly affected by "spread out communities." Thus, the Project would be consistent with this transportation and land use strategy because it makes aggregates available near the end use and may ultimately reduce the total distance that aggregates travel in the Region.

As presented in Section 7.1, the quarry project does not induce growth. The Clean Air Plan accounts for population growth; the aggregate market and corresponding quarry activity levels grow proportionally to population. Thus, the project is considered consistent with the Clean Air Plan, and will not have a significant impact in this regard.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-4: Consistency with Clean Air Plan. The project involves activities and generation of truck traffic that would be potentially inconsistent with the Clean Air Plan.	MM AQ-4: Consistency with Clean Air Plan. Since this effect is less than significant, no mitigation is required.	Less than Significant

Cumulative Effects

Section 15065(a) (3) of the CEQA Guidelines requires a finding that a significant cumulative effect would occur if:

The project has possible environmental effects that are individually limited but cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

The SLOAPCD CEQA Air Quality Handbook states (ALOAPCD 2012:Section 1.5.h):

A cumulative impact analysis should be performed to evaluate the combined air quality impacts of this project and impacts from existing and proposed future development in the area. This should encompass all planned construction activities within one mile of the project.

The proposed Oster/Las Pilitas Quarry is about one-half mile in a crosswind direction from the existing Hanson Santa Margarita Quarry. The Hanson Santa Margarita Quarry has submitted a request to expand the allowable mining area but is not proposing any increase in production or changes to operation that would result in increased air emissions over the current operations according to the Notice of Preparation (NOP). Traffic originating at the Hanson Quarry will not increase as a result of their proposed project, and impacts associated transportation emissions from the proposed Las Pilitas Quarry along the haul routes are less than significant.

Emissions from the existing truck traffic from the Hanson Santa Margarita Quarry is part of the baseline condition in the area, as are emissions from the Rocky Canyon Quarry and other transport service businesses in the area. The 10 in one threshold for cancer risk used to evaluate regulated point source projects is meant to be applied in the context of existing background rates from all sources to determine the significance of emissions from any one source, so it is not a threshold to be used for cumulative effects. From Table 4.3-9, the worst-case cancer risk in the Santa Margarita area from project truck traffic would 1.9 in one million. Since the project daily truck traffic volume would approximately double the number of heavy trucks on this segment of SR 58, a first approximation of the total cancer risk potential would be about 4 in one million. The threshold suggested by SLOAPCD for evaluating non-regulated sources, such as general land development or roadways is an increase in cancer risk of 89 in one million, which is the health risk caused by ambient concentrations of air toxics in San Luis Obispo County (SLOAPCD 2012:1.5.f). Under either threshold, the approximate risk from the existing truck traffic plus that from the project would not represent a significant cancer risk. Furthermore, total aggregate production in a region is determined by market demand, and increased activity at one mine is likely to lead to

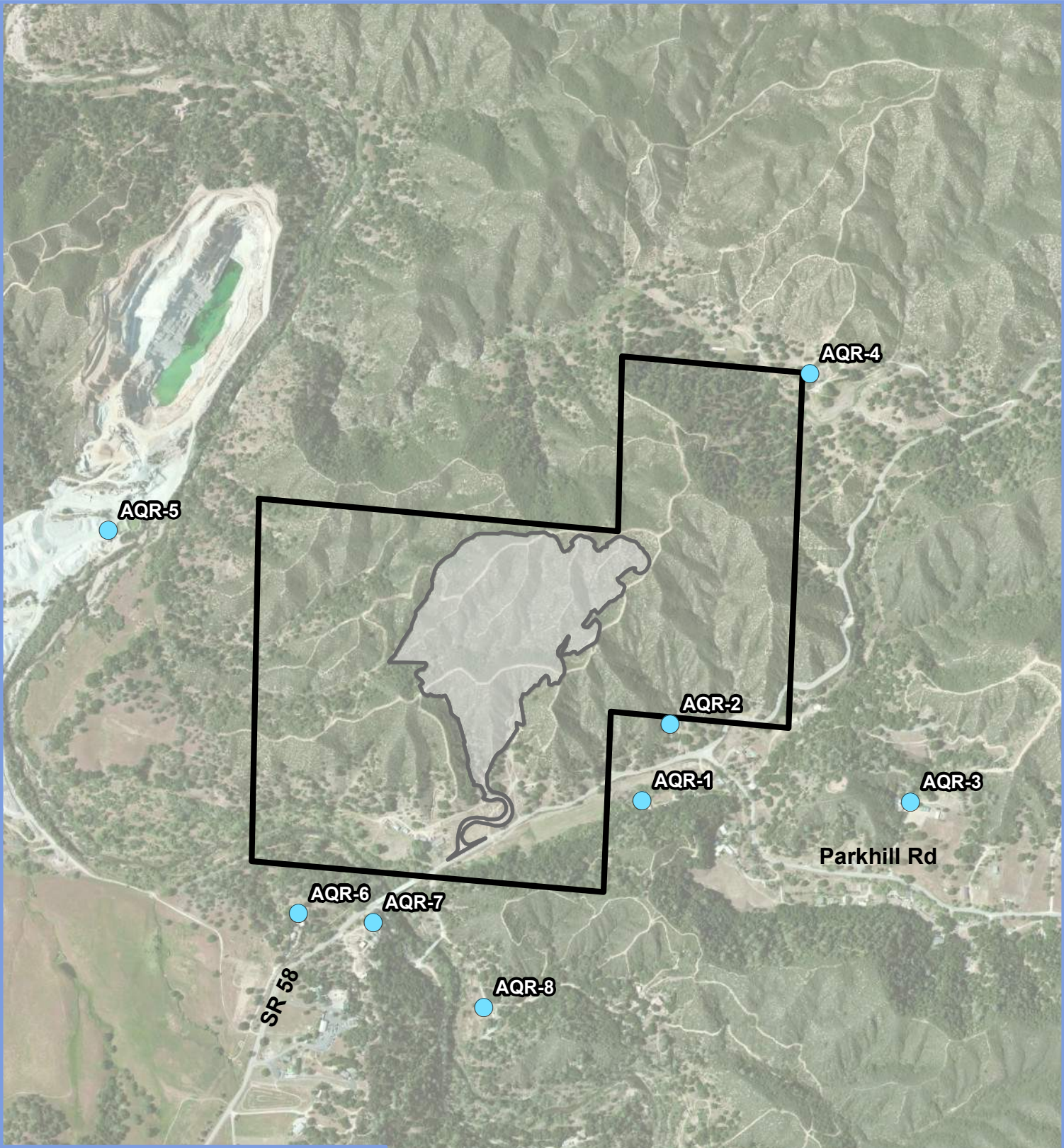
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decreases at another. Therefore, the cumulative effect of the Hanson Santa Margarita Quarry and the project on nearby receptors is considered less than significant.

Other projects in the region that may be considered in the cumulative impact analysis are reviewed in Section 5.0 of this EIR. The only major foreseeable development in the general vicinity includes the completion of approved residential subdivisions in the southern portion of Atascadero (about 400 dwelling units) and the future development of the Eagle Ranch Specific Plan, in the southwestern portion of Atascadero. These locations are about 3.5 and six miles northwest from the project site, respectively. The Santa Margarita Ranch is closer; the approved Agricultural Cluster subdivision in that project is about two miles southwest from the project site. The remaining portions of the Santa Margarita Ranch property, referenced as the “Future Development Program” in the 2008 EIR for that project (San Luis Obispo County 2008:page 2-1), have not been approved for any development beyond continued agricultural and related uses. The extent of future land uses other than agriculture in this Future Development Program is not known; but this entire area is also much more than one mile from the project site. Rural Residential land to the south of the project site (along SR 58) and east (along Parkhill Road) is already subdivided and built out for the most part. A few small projects, consisting of lot splits or parcel maps, have occurred around the outer edges of Santa Margarita or in more remote portions of the region, but none of these is within one mile of the project site. Thus, there are no significant projects, other than the Hanson Santa Margarita Quarry discussed above, that are within one mile of the project site (note: this distance is consistent with Section 1.5(h) of the SLO County APCD CEQA Air Quality Handbook), which would warrant consideration for cumulative effects.

For these reasons, the potential cumulative air quality effect of the project in conjunction with other development in the region is also considered to be less than significant.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT AQ-5: Cumulative Effects Related to Air Quality. The project, in combination with the Hanson Santa Margarita Quarry and other significant projects, involve activities and generation of truck traffic that would be potentially inconsistent with the Clean Air Plan.	MM AQ-5: Cumulative Effects Related to Air Quality. Since this effect is less than significant, no mitigation is required.	Less than Significant

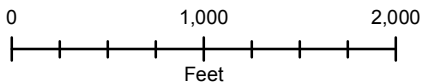


Legend

- Air Quality Receptors
- Property Boundary
- Proposed Quarry

Source: Microsoft Bing Map Mosaic by ESRI

1 inch = 1,000 feet



Salinas Riv

Figure 4.3-1

**Air Quality Receptors
in Project Vicinity**



Oster/Las Pilitas Quarry EIR
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4.4 GREENHOUSE GAS EMISSIONS

This section outlines the Las Pilitas Quarry's contributions to greenhouse gas (GHG) emissions, as well as the current plans and policies recently adopted to reduce those emissions. The CEQA Air Quality Handbook published by the San Luis Obispo County Air Pollution Control District (2009, updated April 2012) contains the following definitions:

***Greenhouse Gas:** The emissions that contribute to the climate change effect are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), chlorofluorocarbons (CFC) and sulfur hexafluoride (F₆S).*

***Climate Change:** Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to GHGs, particularly those generated from the human production and use of fossil fuels.*

4.4.1 Existing Conditions

Regional Setting

San Luis Obispo County covers an area of about 3,316 square miles along the coast of central California. For geography, climate and meteorology the county can be divided into three general regions: 1) Coastal Plateau, 2) Upper Salinas River Valley, and 3) East County Plain. The coastal plateau is immediately inland from the Pacific Ocean and is typically five to ten miles wide. It ranges in elevation from sea level to about 500 feet above sea level, and is bounded on the northeast by the Santa Lucia Mountain Range. The Santa Lucia Range rises to roughly 3,000 feet elevation and runs parallel to the coast almost the entire length of the county. The Upper Salinas River Valley lies inland from the Santa Lucia Range in the northern portion of the county. The east county plain lies further inland along the eastern flank of the county, and includes about one third of the county's area.

The Las Pilitas Quarry is within the Upper Salinas River Valley. The Upper Salinas River Valley, located in the northern one-third of the county, houses 25 percent of the county's population. The Upper Salinas River Valley is characterized by a variety of vegetation communities including riparian, oak woodlands, wetlands, native and nonnative grasslands, and chaparral. Coastal Live Oak and Blue Oak are dominant features of the landscape, with a wide variety of wildlife supported by the oak woodlands scattered throughout the area. Riparian trees such as cottonwoods and willows are common along drainage channels, streams, reservoirs, and marshes. Grassland vegetation is widespread on the rolling hills and flat areas that are either too dry to support oak woodland or have been cleared of oaks in the past.

Local Setting

The Project is within the Upper Salinas River Valley. The Upper Salinas River Valley, located in the northern one-third of the county, houses 25 percent of the county's population. Historically, this region has experienced the highest ozone and particulate levels in the county. Transport of ozone precursors from the coastal plateau and from the San Joaquin Valley may contribute to this condition.

4.4.2 San Luis Obispo County Plans and Policies

Table 4.4-1 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan, relative to this proposed surface mining operation, that are applicable to greenhouse gas issues.

4.4.3 Regulatory Setting

Federal and State requirements applicable to greenhouse gas emissions are presented below in Table 4.4-2.

4.4.4 Assessment Methodology

Emissions are estimated using standard methods published by the California Air Resources Board (e.g., EMFAC2011, OFFROAD2011, CalEEMod) and compared to the 10,000 MTCO₂e/year threshold that has been established by the SLOAPCD (April 2012). Combustion of fossil fuels, electricity use, and water use generate GHG emissions. Construction emissions are assumed to be equal to a half year of operation phase emissions and are then amortized over the 25-year life of the project, following the procedure recommended by the SLOAPCD.

4.4.5 Significance Criteria

At the time the Notice of Preparation/Initial Study was distributed, the County had not revised its Initial Study form to reflect the most recent changes incorporated into Appendix G of the CEQA Guidelines. Consequently, significance criteria for greenhouse gas emissions were derived from the 2012 version of the CEQA Guidelines. Accordingly, the Las Pilitas Quarry project will have a significant impact related to greenhouse gas emissions if it will:

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
2. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

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GREENHOUSE GAS EMISSIONS**

**TABLE 4.4-1
POLICY CONSISTENCY ANALYSIS – GREENHOUSE GAS EMISSIONS**

Source (Conservation and Open Space Element)	Policy Statement	Discussion	Preliminary Determination
Policy AQ 1.2	Reduce vehicle miles traveled. Require projects subject to discretionary review to minimize additional vehicle travel.	Providing a local source for aggregate material, rather than importing such material from outside the area, minimizes long haul distances; reduction of vehicle trips therefore reduces fuel consumption and concurrent emission of greenhouse gases.	Potentially Consistent
Implementation Strategy AQ 1.2.1 (c)	New or expanded commercial, industrial, public, or mixed use projects with 25 employees or more should provide TDM programs such as parking cash-out, subsidized transit passes, ridesharing incentives, vanpools, employee showers, and bicycle parking and storage facilities.	Since the Quarry would employ no more than 3 to 5 people at full operations, this Strategy would not apply.	Potentially Consistent
Policy AQ 1.5	Transportation efficiency. Improve the operating efficiency of the transportation system by reducing vehicle travel demand and expanding opportunities for multi-modal travel.	Providing a local source for aggregate material, rather than importing such material from outside the area, minimizes long haul distances; reduction of vehicle trips therefore reduces fuel consumption and concurrent emission of greenhouse gases. In addition, the project includes provisions for expanding the County's trail network by providing an easement over the subject property as a condition of approval.	Potentially Consistent
Policy AQ 1.7	Bicycle and pedestrian travel. Encourage bicycle and pedestrian use by supporting the policies found in the Regional Transportation Plan, County Bikeways Plan, Land Use and Circulation Element, and County Parks and Recreation Element. In addition, support public and private efforts to facilitate bicycling and walking for transportation and recreation.	Since the Quarry would employ no more than 3 to 5 people at full operations, and due to the remote location of the proposed mine, this strategy would not apply for worker transportation. In addition, the project includes provisions for expanding the County's trail network by providing an easement over the subject property as a condition of approval.	Potentially Consistent

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**TABLE 4.4-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – GREENHOUSE GAS EMISSIONS**

Source (Conservation and Open Space Element)	Policy Statement	Discussion	Preliminary Determination
Policy AQ 4.1	Reduce greenhouse gas emissions. Implement and enforce State legislative or regulatory standards, policies, and programs designed to reduce greenhouse gas emissions.	Although this Policy applies principally to the County as a regulatory agency, operations of this quarry, including construction dust control, equipment maintenance and implementation of a Reclamation Plan, will implement those regulations.	Potentially Consistent
Implementation Strategy AQ 4.2.2	2006 GHG Emissions Baseline Inventory Report. Refer to the 2006 Greenhouse Gas Emissions Baseline Inventory Report as the baseline for greenhouse gas emissions levels from County municipal operations and community-related activities until updated. (Report included as Appendix 2).	The analysis presented in this EIR is based on Appendix 2 of the Conservation and Open Space Element.	Potentially Consistent
Policy AQ 4.4	Development projects and land use activities. Reduce greenhouse gas emissions from development projects and other land use activities.	Operations of this quarry, including construction dust control, equipment maintenance and implementation of a Reclamation Plan, will implement these regulations.	Potentially Consistent
Implementation Strategy AQ 4.4.3	Reduce GHG emissions from community-wide transportation activities. Reduce greenhouse gas emissions resulting from communitywide transportation activities through expanded use of alternative fuel vehicles, increased use of alternative transportation modes, decreased VMT, development of compact, mixed-use, infill projects in established communities and urban areas, and other strategies identified in the Climate Action Plan. (Also refer to Policies AQ 1.1 – 1.8 above.)	This Strategy is more applicable to urban/suburban areas; the relatively rural setting of this quarry would not conflict with this strategy.	Potentially Consistent

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**TABLE 4.4-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – GREENHOUSE GAS EMISSIONS**

Source (Conservation and Open Space Element)	Policy Statement	Discussion	Preliminary Determination
Implementation Strategy AQ 4.5.1	Identify carbon sequestration resources. Identify existing and potential opportunities for terrestrial and aquatic sequestration in the county, including but not limited to County lands, reclaimed mining lands, agricultural lands, and other areas or activities as appropriate.	The Reclamation Plan has identified opportunities for carbon sequestration, through the plant materials selected for landscaping.	Potentially Consistent
Implementation Strategy AQ 5.1.1	Risk of sea level rise. Work with the Office of Emergency Services to identify the potential for sea level rise in the coastal planning areas. Amend the County's CEQA Initial Study Checklist, Area Plans, the Coastal Zone Land Use Ordinance, Safety Element, and Local Hazard Mitigation Plan as appropriate.	Since this Quarry site is located more than 10 miles from the Pacific Ocean, the potential effects of sea level rise on the site are negligible.	Potentially Consistent
Implementation Strategy AQ 5.2.5	Support green business. Support local efforts to develop "green" or sustainable business practices that reduce greenhouse gas emissions and improve overall quality of life in the County.	Providing a local source for aggregate material, rather than importing such material from outside the area, minimizes long haul distances; reduction of vehicle trips therefore reduces fuel consumption and concurrent emission of greenhouse gases.	Potentially Consistent

**FINAL EIR OSTER/LAS PILITAS QUARRY
GREENHOUSE GAS EMISSIONS**

**TABLE 4.4-2
SUMMARY OF STATE AND FEDERAL REQUIREMENTS
GREENHOUSE GAS EMISSIONS**

Requirements	Administering Agency	Applicability
Federal		
Endangerment and Cause or Contribute Findings: US EPA must consider greenhouse gases to be air pollutants subject to regulation under the Clean Air Act.	US Environmental Protection Agency.	“These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing greenhouse gas emissions standards for vehicles. In collaboration with the National Highway Traffic Safety Administration, EPA finalized emission standards for light-duty vehicles (2012–2016 model years) in May of 2010 and heavy-duty vehicles (2014–2018 model years) in August of 2011.” (http://www.epa.gov/climatechange/endangerment.html)
Tailoring Rule: Entities that newly construct or modify existing stationary sources of GHG emissions above certain thresholds must obtain a federal permit to operate.	San Luis Obispo County Air Pollution Control District (i.e., Rules 216 and 221) as delegated authority by US EPA to operate the federal operating permit program.	The Tailoring Rule applies to sources in all sectors including mining. The Rule also required administering agencies (e.g., San Luis Obispo County Air Pollution Control District) to develop rules implementing the Rule. Potentially applicable to the Project would be the requirement for new stationary sources of GHG emissions to obtain a federal permit to operate if emissions are greater than 100,000 tons per year of carbon dioxide equivalent.
State		
California Governor’s Executive Order S-03-05 (2005)	Secretary of the California Environmental Protection Agency, in coordination with: the Secretary of the Business, Transportation and Housing Agency, Secretary of the Department of Food and Agriculture, Secretary of the Resources Agency, Chairperson of the Air Resources Board, Chairperson of the Energy Commission, and the President of the Public Utilities Commission	Established GHG reduction targets for the State, as follows: <ul style="list-style-type: none"> • By 2010, reduce GHG emissions to 2000 levels; • By 2020, reduce GHG emissions to 1990 levels; • By 2050, reduce GHG emissions to 80 percent below 1990 levels.

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GREENHOUSE GAS EMISSIONS**

**TABLE 4.4-2 (CONTINUED)
SUMMARY OF STATE AND FEDERAL REQUIREMENTS
GREENHOUSE GAS EMISSIONS**

Requirements	Administering Agency	Applicability
Assembly Bill 32 (AB 32) – California Global Warming Solutions Act of 2006	California Air Resources Board (CARB).	AB 32 requires CARB, the state agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to 1990 statewide levels by 2020, which is equivalent to an approximate 15 percent reduction below 2005 GHG levels.
Senate Bill 375 (SB 375)	California Air Resources Board (CARB).	SB 375 enhances California's ability to reach its AB 32 goals by promoting good planning with the goal of more sustainable communities. SB 375 mandates regional greenhouse gas emission reduction targets for passenger vehicles. Pursuant to SB 375, the California Air Resources Board (CARB) established targets for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations (MPO). SLOCOG, as the regional MPO, must prepare a SCS that demonstrates how the region will meet its greenhouse gas reduction target through integrated land use, housing and transportation planning. Once adopted by SLOCOG, the SCS will be incorporated into the Regional Transportation Plan for San Luis Obispo County.
County/Regional		
Conservation and Open Space Element of the San Luis Obispo County General Plan	County of San Luis Obispo.	<p>Purpose (as derived from the Element):</p> <p>The County recognizes the importance of clean air for a healthy environment and vibrant communities for current and future generations.</p> <ul style="list-style-type: none"> • Clean air protects the health of residents • Clear skies and clean air are attractive for tourism, which contributes to economic vitality • Clean air sustains our water resources, crops, and ecosystems • Achieving clean air helps to reduce greenhouse gas emissions and the effect of global climate change • Clean air is a highly valued resource by residents and visitors

**FINAL EIR OSTER/LAS PILITAS QUARRY
GREENHOUSE GAS EMISSIONS**

**TABLE 4.4-2 (CONTINUED)
SUMMARY OF STATE AND FEDERAL REQUIREMENTS
GREENHOUSE GAS EMISSIONS**

Requirements	Administering Agency	Applicability
		<p>This General Plan Element focuses on goals and policies that the County will pursue to improve local and regional air quality and to reduce San Luis Obispo County's contribution to global climate change. Specifically, the following two Goals are directly relevant to GHG emissions:</p> <p><u>Goal AQ 4.</u> Greenhouse gas emissions from County operations and communitywide sources will be reduced from baseline levels by a minimum of 15 percent by 2020.</p> <p><u>Goal AQ 5.</u> The County will adapt to adverse climate change.</p>
2006 Greenhouse Gas Emissions Baseline Inventory Report (Appendix 2 of the Conservation and Open Space Element of the San Luis Obispo County General Plan).	County of San Luis Obispo.	The 2006 Greenhouse Gas Emissions Baseline Inventory found that, in the baseline year 2006, the community (unincorporated San Luis Obispo County) emitted approximately 1,506,163 metric tons of carbon dioxide equivalents (CO ₂ e). The transportation sector was by far the largest emitter (64.8 percent), producing approximately 976,585 metric tons of CO ₂ e in 2006. Emissions from the residential, commercial, and industrial sectors accounted for a combined 23.4 percent of the total while emissions from livestock and agricultural equipment comprised 9.7 percent of the total.
Rule 216 – Federal Part 70 Permits	San Luis Obispo County Air Pollution Control District as delegated authority by US EPA to operate the federal operating permit program.	Requires major sources that emit GHG's in quantities of 100,000 tons per year or more to obtain an operating permit.
Rule 221 – Federal Part 70 Potential to Emit Limitations	San Luis Obispo County Air Pollution Control District as delegated authority by US EPA to operate the federal operating permit program.	Requires reporting and recordkeeping from sources with emissions greater than 50 percent of the federal major source thresholds and establishes a de minimis level for GHG emissions of 5,000 MTCO ₂ e/yr.

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Other local agencies in California have published industrial source GHG thresholds for use in CEQA. 10,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/year) is used by South Coast and Bay Area AQMDs while Mojave Desert AQMD has chosen to maintain consistency with EPA by setting their threshold equal to the major source threshold of 100,000 MTCO₂e/year. This Environmental Impact Report uses the more conservative value of 10,000 MTCO₂e/year. In April 2012, the SLOAPCD revised its CEQA Air Quality Handbook to incorporate local GHG thresholds for project operational conditions. For stationary sources, the SLOAPCD threshold is 10,000 MTCO₂e/year (SLOAPCD 2012: page 3-6).

4.4.6 Project Impacts and Mitigation Measures

Based on the analysis conducted, GHG emissions impacts are negligible for this Quarry project.

Greenhouse Gas Generation

GHG emissions from Project activities are calculated based upon engine hours and size as presented in the air quality appendices to be 3,961 MTCO₂e/year (Appendix D). Grid electricity would be used to power the scale house and pump water. The scale house would have minor electricity use as compared to the water pump which turns out to be a minor source of GHG emissions overall.

Water use would be up to 4,000 gallons per day for dust control, plus up to 1,000 gallons per day for reclamation irrigation and 500 gallons per day for other domestic use. For purposes of GHG emissions estimation, 5,500 gallons are conservatively assumed to be used for 250 operating days and total 1.25 MM gallons/year. It is assumed that the water will be pumped from a well on-site using an electric pump. Electricity used is estimated based on the CEC Public Interest Energy Research (PIER) Program report “Refining Estimates of Water-Related Energy Use in California” (December 2006, CEC-500-2006-118). Electricity use is estimated to be 150 kWh/MG based on Table 4 of the CEC document and the fact that water will be supplied and conveyed (on-site) and would not be treated, or distributed by a publicly owned treatment works, or become wastewater that would require treatment. On this basis, Project electricity use is rounded up to 0.2 MWh/year and GHG emissions are calculated to be less than 0.1 MTCO₂e/year based on the eGRIDweb for the WECC California subregion (U.S. EPA 2007)

Greenhouse Gas Emissions Impact Screening

The information in Table 4.4-3 summarizes the incremental change in GHG emissions resulting from the Project and demonstrates that it does not exceed the SLOAPCD GHG screening threshold of 10,000 MTCO₂e/year. This impact is less than significant.

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GREENHOUSE GAS EMISSIONS**

**TABLE 4.4-3
INCREMENTAL CHANGE IN
GREENHOUSE GAS EMISSIONS**

Energy Use	Emissions by Calendar Year (MTCO ₂ e/year)
Fuel Use	3,961
Electricity Use	0.1
Incremental Change	+3,961

Source	CO2 Emissions (tons/yr)
Blasting	56.6
Non-Road Engines	744
Trucks Running On-site	61.5
Trucks Idling On-site	19.8
Subtotal On-site	882
Trucks Running Off-site	3,054
Passenger Vehicles Running Off-site	24.8
Subtotal Off-site	3,079
Total All Emissions	3,961
SLOAPCD Significance Threshold	10,000
Project Exceeds Threshold?	No

Description of Impact	Mitigation Measure	Residual impact
IMPACT GHG-1: Greenhouse Gas Generation. The greenhouse gas emissions generated from the Quarry project may potentially exceed the Screening Threshold (10,000 MTCO ₂ e/year) established for evaluating these emissions.	MM GHG-1: Greenhouse Gas Generation. Since this effect is less than significant, no mitigation is required.	Less than Significant

Potential Plan Conflicts

The most applicable greenhouse gas reduction policies are found in the Conservation and Open Space Element of the San Luis Obispo County General Plan. Table 4.4-1 presents a preliminary review of Plans and Policies of the County General Plan, relative to this proposed surface mining operation, that are applicable to greenhouse gas issues. In all cases, the Quarry project is potentially consistent with all of these policies.

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GREENHOUSE GAS EMISSIONS**

Description of Impact	Mitigation Measure	Residual impact
IMPACT GHG-2: Potential Plan Conflicts. The Quarry project may potentially conflict with the applicable Greenhouse Gas Emission policies of the Open Space and Conservation Element of the County General Plan.	MM GHG-2: Potential Plan Conflicts. Since this effect is less than significant, no mitigation is required.	Less than Significant

Cumulative Effects

Given the regional (and global) nature of impacts related to GHG emissions, the analysis of GHG impacts is always in a cumulative framework. The SLOAPCD threshold of 10,000 MTCO₂e/year used in the discussions above is a threshold for determining the significance of a project contribution to cumulative GHG emissions and climate change. The CEQA Air Quality Handbook states (SLOAPCD 2009: Section 3.5.6):

If annual emissions of GHGs exceed these threshold levels, [10,000 MTCO₂e/year for stationary sources] the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

Since the GHG emissions from the proposed quarry would be less than the threshold, it would not have a cumulative impact.

Other pending projects in the general region that would also emit GHG are listed in Section 5.0 of this EIR. The larger development projects include the Eagle Ranch Specific Plan and the undeveloped parts of the Dove Creek Planned Development, both in the City of Atascadero, and the Santa Margarita Ranch Agricultural Residential Cluster subdivision. Each of these projects is subject to evaluation regarding its GHG emissions. They are either already part of the regional baseline emissions, or will have their GHG emissions evaluated as part of CEQA review using the appropriate thresholds for each type of project in the SLOAPCD CEQA Air Quality Handbook.

The Hanson Santa Margarita Quarry is also an existing source of GHG emissions in the region. A pending application to increase the mined area within that quarry would continue the operation at its current level of activity, so there would be little or no increase in GHG emissions associated with that project. Both the Hanson Quarry and the proposed Oster/Las Pilitas Quarry are strategically located within the La Panza Granitics, a large area that is classified as a significant mineral deposit for aggregate purposes (MRZ-2) by the California State Geological Survey 2011 Special Report 215 (Busch and Miller 2011:pages 6 and 11). These two mines are located within the western margin of this large area, relatively near future development within the County. The location in this part of the La Panza Granitics will help to minimize the length of on-highway truck trips to deliver aggregate to market

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GREENHOUSE GAS EMISSIONS**

areas within the County, and help to keep GHG emissions associated with aggregate transport low.

In summary, since the project itself would have GHG emissions well below the threshold used to determine cumulative impacts, and since the project location is relatively favorable in terms of minimizing trip distances to market, its GHG emissions will not have a cumulative significant impact.

Description of Impact	Mitigation Measure	Residual impact
IMPACT GHG-3: Cumulative Effects Related to Greenhouse Gas Emissions. The greenhouse gas emissions generated from the Quarry project may be significant, when combined with the emissions from the Hanson Quarry or other sources.	MM GHG-3: Cumulative Effects Related to Greenhouse Gas Emissions. Since this effect is less than significant, no mitigation is necessary.	Less than Significant

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GREENHOUSE GAS EMISSIONS**

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4.5 BIOLOGICAL RESOURCES

This section identifies the botanical and wildlife species, natural communities and habitats, and environmental issues that will or may occur on the Oster Quarry Project Site (Project) and immediate area. The analysis in this section is supported by the biological/botanical assessment report prepared by LFR in 2009 (included in Appendix B) and a follow-up botanical assessment letter report prepared by Terra-Verde in 2011, which also reported any sensitive wildlife species encountered.

4.5.1 Existing Conditions

Regional Setting

The Las Pilitas Planning Area includes about 65,500 acres, and is central within the rural planning areas that occupy the mountainous land between the flatter Salinas River valley to the west and the Shandon-Carrizo Planning Area to the east. The project site is near the western boundary of the Las Pilitas Planning Area, which at this location is formed by the Salinas River. The project vicinity is within a geographic transition that separates the flatter alluvial areas and lower hills to the west from the steeper hillsides to the east.

Local Setting

The site is located less than one half mile east of the Salinas River in San Luis Obispo County, California. Moreno Creek is south of the site on the opposite side of State SR 58; Moreno Creek connects to the Salinas River southwest of the site. The site is largely surrounded by undeveloped open space, with the exception of the Hanson Aggregate granite quarry located less than one half mile northwest of the site. In general, moderately steep to steep terrain dominates the site with slopes ranging from 15 to 75 percent.

Biological Characterization of San Luis Obispo County

The Project Site occurs in the biological transition zone between the moister communities of central and northern California and the more arid communities of southern California. North of this region, the Coast Ranges extend from San Luis Obispo to Alaska. At Point Conception to the south, the California coastline turns eastward, reflecting the east-west orientation of the Transverse Ranges, resulting in a major geologic and climatic transition zone, with cooler, windier, and moister conditions north of Point Conception, and drier and warmer conditions to the south (Ferren et al. 1984). The Project Site is located on the eastern side of the Coast Range and is therefore drier and temperatures are less strongly influenced by the moderating Pacific Ocean.

Habitat Types within San Luis Obispo County

The distribution of plant associations on the site is determined by topography, soils and geology, hydrology, slope exposure, climate, and land use history. Five upland communities were identified on-site during the surveys conducted by LFR: Chaparral, Coast Live Oak Woodland/Forest, Foothill Woodland, Diablan Sage Scrub, and Annual Grassland/Ruderal (see Figure 4.5-1, “Plant Communities Identified in LFR Report”).

4.5.2 San Luis Obispo County Plans and Policies

Table 4.5-1 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan, relative to this proposed surface mining operation, that are applicable to Biological Resource issues.

4.5.3 Regulatory Setting

Federal and State requirements applicable to biological resources are presented below in Table 4.5-2.

Sensitive Plants

A total of seven sensitive plants have been documented on-site or are presumed to be present within the project boundaries. During the LFR surveys, five sensitive plants were observed at the site, with a sixth species not observed, but with suitable habitat present (Yellow flowered eriastrum). A seventh species was not documented, but appears likely to be present based on California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB; CDFG 2012) records (Hardham’s suncups). Follow-up surveys on May 12 and July 1, 2011 by Terra-Verde did not identify any additional sensitive plants, but did confirm the presence of Yellow flowered eriastrum. All of the identified species are listed by the California Native Plant Society (CNPS 2012) and are considered to be species of local concern in San Luis Obispo County (Chesnut 2007; Dieter Wilken pers. comm.). Of the seven species, three are on List 1B.2 for plants that are rare and/or endangered in California or elsewhere, and in California, are fairly threatened; two are on List 1B.3 for plants that are rare and/or endangered in California or elsewhere although not very endangered in California; one is on List 4.2, plants of limited distributions that are fairly threatened in California; and one is on List 4.3, plants of limited distributions that are not very endangered in California. The sensitive herb or shrub species were not found in high numbers, but most occur in openings in the chaparral. As indicated below, it is assumed that other individuals of these species occur with similar frequency on the site but were not observed by LFR or Terra-Verde due to the dense chaparral cover.

Both public and private open space/reserves are located within the general area of the site and are detailed in the Table 4.5-3 below.

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BIOLOGICAL RESOURCES**

**TABLE 4.5-1
POLICY CONSISTENCY ANALYSIS – BIOLOGICAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
Policy BR 1.1	<p>Protect Sensitive Biological Resources: Protect sensitive biological resources such as, wetlands, migratory species of the Pacific flyway, and wildlife movement corridors through:</p> <ol style="list-style-type: none"> 1. Environmental review of proposed Development applications, including consideration of cumulative impacts; 2. Participation in comprehensive habitat management programs with other local and resource agencies; and, 3. Acquisition and management of open space lands that provide for permanent protection of important natural habitats. 	The County has prepared an EIR for the proposed project and a number of mitigation measures have been recommended to minimize impacts to sensitive biological resources.	Potentially Consistent
Policy BR 1.10	Identify and Protect Ecologically Sensitive Areas: Protect and enable management of ecologically sensitive areas to the maximum extent feasible.	The Applicant has provided studies that address ecologically sensitive areas within the project area. In addition, mitigation measures have been identified in the EIR to further reduce impacts.	Potentially Consistent
Policy BR 1.12	Development Impacts to Corridors: Ensure that important corridors for wildlife movement and dispersal are protected as a condition of discretionary permits. Provide linkages and corridors as needed to connect sensitive habitat areas such as woodlands, forests, and wetlands.	The proposed location and small footprint of the proposed project would not impact landscape-level wildlife movement corridors.	Potentially Consistent
Policy BR 1.15	Restrict Disturbance in Sensitive Habitat During Nesting Season: Avoid impacts to sensitive riparian corridors, wetlands, and coastal areas to protect bird-nesting activities.	Measures have been identified for the protection of raptors and other sensitive bird species during the nesting season. Mitigation for impacts to wetlands has been identified in the EIR to off-set impacts.	Potentially Consistent
Policy BR 2.1	Coordinate with Trustee Agencies: The County will consult with trustee and other relevant state and federal agencies during environmental review when special-status species, sensitive natural communities, marine resources, or wetlands may be affected.	All regulatory agencies with jurisdictional authority over the project have been, and will continue to be, provided with the opportunity to comment on the project throughout the environmental review process.	Potentially Consistent

**FINAL EIR OSTER/LAS PILITAS QUARRY
BIOLOGICAL RESOURCES**

**TABLE 4.5-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – BIOLOGICAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
Policy BR 2.2	Promote Early Consultation with Other Agencies: Require applicants to consult with all agencies with review and/or permit authority for projects in areas supporting wetlands and special-status species at the earliest opportunity.	Since submittal of the project's Conditional Use Permit (CUP) application package, the County has encouraged the Applicant's early consultation with all regulatory agencies that have jurisdictional authority over the project.	Potentially Consistent
Policy BR 2.6	Development Impacts to Listed Species: Ensure that potential adverse impacts to threatened, rare, and endangered species from development are avoided or minimized through project siting and design. Ensure that proposed development avoids significant disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species. When avoidance is not feasible, require no net loss of sensitive natural plant communities and critical habitat areas.	The project preserves 69 acres of open space, to permanently protect sensitive species (Mitigation BIO-1).	Potentially Consistent
Policy BR 2.9	Promote Use of Native Plant Species: Landscaping for proposed development will use a variety of native or compatible non-native, non-invasive plant species as part of project landscaping to improve wildlife habitat values.	Implementation of the project would include post-construction landscaping using native plant species.	Potentially Consistent
Policy BR 3.2	Protection of Native Trees in New Development: Require proposed discretionary development and land divisions to avoid damage to native trees (e.g., Monterey Pines, oaks) through setbacks, clustering or other appropriate measures. When avoidance is not feasible, require mitigation measures.	The project preserves 69 acres of open space, to permanently protect sensitive Oak woodland (Mitigation BIO-1), and the project has been designed to retain as many trees as possible.	Potentially Consistent
Policy BR 3.3	Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity, and wildlife habitat.	The project preserves 69 acres of open space, to permanently protect sensitive Oak woodland (Mitigation BIO-1).	Potentially Consistent

**FINAL EIR OSTER/LAS PILITAS QUARRY
BIOLOGICAL RESOURCES**

**TABLE 4.5-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – BIOLOGICAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
Policy BR 4.1	Protect streams and riparian vegetation to preserve water quality and flood control functions and associated fish and wildlife habitat.	The project would affect stream and riparian habitat as part of the construction activities. The EIR has identified mitigation measures to compensate for impacts to the streams and riparian habitat. Also, other agency approvals/permits would be required, and the stipulations of these approvals would further protect stream and riparian habitat.	Potentially Inconsistent
Policy BR 4.2	Minimize the impacts of public and private development on streams and associated riparian vegetation due to construction, grading, resource extraction, and development near streams.		
Policy BR 4.5	Encourage Stream Preservation on Private Lands: Encourage private landowners to protect and preserve stream corridors in their natural state and to restore stream corridors that have been degraded.		
Policy BR 4.3	Alluvial Well Extractions: Require discretionary projects that depend on alluvial well extractions and stream diversion to monitor the long-term effects on surface streamflow and riparian vegetation. Identify and implement contingencies for maintaining streamflow (e.g., minimum bypass flows, alternate water sources, decreased pumping rates, groundwater discharge).	The anticipated water use associated with the proposed project and existing uses on the site is approximately 7 AFY. The lowest base flow in the Salinas River in the vicinity of the project site is approximately 800 AFY (see section 4.13 and Appendix F) therefore monitoring is not necessary.	Potentially Inconsistent
Policy BR 5.1	Protect Wetlands: Require development to avoid wetlands and provide upland buffers.	The EIR has considered the project's setting and potential impacts to wetlands and, as applicable, mitigation measures to reduce impacts to wetlands have been identified. The project would not result in the loss of wetland or the conversion of wetlands. A number of design features such as the use of containment berms for the pads would serve to protect wetlands.	Potentially Consistent
Policy BR 5.2	No Net Loss of Wetlands: Ensure that all public and private projects avoid impacts to wetlands if feasible. If avoidance is not feasible, ensure no net loss of wetlands, consistent with state and federal regulations and this Element.		
Policy BR 5.3	Wetland Conversion: Avoid the conversion of wetlands, including vernal pools, except where grazing may improve the health and function of those wetlands. Where grazing occurs in and around wetlands and vernal pools, encourage grazing management that improves the health and function of those wetlands.		

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BIOLOGICAL RESOURCES**

**TABLE 4.5-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – BIOLOGICAL RESOURCES**

Source	Policy Statement	Discussion	Preliminary Determination
Policy BR 5.4	Wetlands on Agricultural Lands: Support use of best management practices and proper range uses to minimize impacts to wetlands on agricultural lands.		

The CNDDDB and CNPS Electronic Inventory search indicate the presence of additional plant species not observed during the 2009 surveys, that have been reported in the Santa Margarita and adjacent quadrangles, or that may potentially occur in the habitat present at the site. The following plants were not observed by LFR or Terra-Verde at the site but are known to occur in the general region. These plants are discussed in greater detail in Table 4.5-4. Species include: Caper-leaved Tropicocarpum (*Tropicocarpum capparideum*), San Luis Obispo Owl’s clover (*Castilleja densiflora* subsp. *obispoensis*), Cambria Morning Glory (*Calystegia subacaulis* subsp. *episcopalis*), San Luis Obispo County Lupine (*Lupinus ludovicianus*), Michael’s Rein Orchid (*Piperia michaelii*), and Paso Robles Navarretia (*Navarretia jaredii*). All sensitive species observed at the site or which have been reported from the area using the CNDDDB and CNPS Electronic Inventory search are included in Table 4.5-4.

Descriptions of Sensitive Plant Species

The following descriptions identify the sensitive plant species observed within the surveyed portion of the site. Information on these plants was supplemented by CalFlora (2012). Locations for those species found by LFR and Terra-Verde are included in Figure 4.5-2, “Locations of Sensitive Species within Quarry Area.”

Shining Navarretia (*Navarretia nigelliformis* subsp. *radians*). Shining navarretia is categorized as CNPS 1B.2, a plant of limited distribution that is fairly threatened in California. It is found in heavy soils in grasslands, woodlands, chaparral, and vernal pools in interior portions of central California from Merced County south to San Luis Obispo County. In San Luis Obispo County, shining navarretia occurs near the Salinas River from San Miguel to Templeton and Santa Margarita, east to Cholame. Shining navarretia is reportedly threatened by grazing, development, and competition from non-native plants. It is endemic to interior portions of central California from Merced County south to San Luis Obispo County (Fresno, Merced, San Benito, Monterey, and San Luis Obispo Counties).

Occasional individuals of shining navarretia were observed in the northwest portion of the site, both in openings in the chaparral and in roadways.

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BIOLOGICAL RESOURCES**

**TABLE 4.5-2
SUMMARY OF STATE AND FEDERAL
REQUIREMENTS – BIOLOGICAL RESOURCES**

Requirement	Administering Agency	Applicability
State		
California Endangered Species Act of 1984, Fish and Game Code, §2050 through §2098	California Department of Fish and Game (CDFG)	Protects California's endangered and threatened plant and animal species.
Title 14, California Code of Regulations (CCR) §§670.2 and 670.5	CDFG	Lists plant and animals of California declared to be threatened or endangered.
Fish and Game Code Fully Protected Species §3511: Fully Protected Birds §4700: Fully Protected Mammals §5050: Fully Protected Reptiles and Amphibians §5515: Fully Protected Fishes	CDFG	Prohibits the taking of listed plants and animals that are Fully Protected in California.
Fish and Game Code, §1930, Significant Natural Areas	CDFG	Identifies and protects Significant Natural Areas of California.
Fish and Game Code, §1580, Designated Ecological Reserves	CDFG	Identifies Designated Ecological Reserves of California.
Fish and Game Code, §1600, Streambed Alteration Agreement	CDFG	Reviews projects for impacts on waterways, including impacts to vegetation and wildlife from sediment, diversions, and other disturbances.
Native Plant Protection Act of 1977, Fish and Game Code, §1900 <i>et seq.</i>	CDFG	Designates state rare and endangered plants and provides specific protection measures for identified populations.
CDFG Policies and Guidelines, Wetlands Resources Policy	CDFG	Provides for the protection, preservation, restoration, enhancement, and expansion of wetland habitats in California, including vernal pools.
Public Resources Code, §§25500 and 25527	CDFG, USFWS	Prohibits siting of facilities in certain areas of critical concern for biological resource, such as ecological preserves, refuges, etc.
Public Resources Code, §21083.4	CDFG, and local government as appropriate	Conversion of Oak Woodlands.
Title 20 CCR §§1702 (q) and (v)	CDFG, USFWS	Protects "areas of critical concern" and "species of special concern" identified by local, state, or federal resource agencies within the project area, including the California Native Plant Society.

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**TABLE 4.5-2 (CONTINUED)
SUMMARY OF STATE AND FEDERAL
REQUIREMENTS – BIOLOGICAL RESOURCES**

Requirement	Administering Agency	Applicability
Title 14 CCR Section 15000 <i>et seq.</i>	CDFG, USFWS	Describes the types and extent of information required to evaluate the effects of a proposed project on the biological resources of a project site.
Federal		
Endangered Species Act of 1973 and implementing regulations, Title 16 United States Code (USC) §1531 <i>et seq.</i> (16 USC 1531 <i>et seq.</i>), Title 50 Code of Federal Regulations (CFR) §17.1 <i>et seq.</i> (50 CFR 17.1 <i>et seq.</i>)	U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service	Designates and protects federally threatened and endangered plant and animals and their critical habitat.
Section 7 of Fish and Wildlife Coordinating Act, 16 USC 742 <i>et seq.</i> , 16 USC 1531 <i>et seq.</i> , and 50 CFR 17.	USFWS	Requires consultation if any project facilities could jeopardize the continued existence of an endangered species. Applicability depends on federal jurisdiction over some aspect of the project.
Section 10(a)(1)(A) of the ESA	USFWS	Requires a permit to “take” threatened or endangered species during lawful project activities. If there is no federal nexus for the project, a Habitat Conservation Plan (HCP) may be required.
Section 404 of the Clean Water Act of 1977 (33 USC 1251 <i>et seq.</i> , 33 CFR §§ 320 and 323)	U.S. Army Corps of Engineers (USACE)	Gives USACE authority to regulate discharge of dredge or fill material into Waters of the U.S. including wetlands.
Section 401 of the Clean Water Act of 1977	Regional Water Control Board	Requires applicant to conduct water quality impact analysis for the project when using 404 permits and for discharge to waterways.
Migratory Bird Treaty Act 16 USC §§703-711	USFWS	Prohibits the non-permitted “take” of native migratory birds, their nests, or eggs.

La Panza Mariposa Lily (*Calochortus simulans*). La Panza lily is categorized as CNPS 1B.3, a plant of limited distribution in California. It is endemic to central San Luis Obispo County and usually is found in granitic sands in grassland, chaparral, woodland, and lower montane coniferous forest habitats, although it has been found growing on sandstone at Indian Knob, Carpenter Canyon, Canyon Number 1 (CNDDDB 2012), and immediately south of the project site. Its localized range extends from Tassajara Creek and the Atascadero region southwards to Trout Creek by the Huasna River. San Luis mariposa lily is threatened

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**TABLE 4.5-3
OPEN SPACES AND RESERVES WITH SENSITIVE
PLANT RESOURCES NEAR PROJECT SITE**

Open Space/Reserves	Distance from Site	Sensitive Plant Species
Cuesta Ridge Botanical Area	6 miles southwest	<i>Sidalcea hickmanii</i> subsp. <i>anomala</i> , <i>Arctostaphylos obispoensis</i> , <i>Calochortus obispoensis</i> , <i>Chorizanthe breweri</i> , <i>Cirsium fontinale obispoense</i> , <i>Fritillaria viridea</i> , and <i>Mondardella palmeri</i>
Rinconada Mine Botanical Area	8 miles southeast	<i>Mondardella palmeri</i>
Wilson Corner Area and Shell Creek Area	12 miles east	Diverse native herbaceous plant species

by grazing, recreation, road construction, and mining. It is endemic to central San Luis Obispo County and a small portion of northern Santa Barbara County.

Isolated individuals of La Panza mariposa lily were observed by LFR in a three locations growing in openings in chaparral vegetation. This species is difficult to find and may be present elsewhere on-site.

Straight-awned Spineflower (*Chorizanthe rectispina*). Straight-awned spineflower is categorized as CNPS 1B.3, a plant of limited distribution in California. It occurs in openings in coastal scrub, chaparral, and woodland vegetation in southern Monterey and San Luis Obispo Counties; reports from Santa Barbara County are erroneous (Dieter Wilken, personal communication). It occurs on granite, sand, and shale substrates. It is threatened by grazing, development, competition with non-native species, and mining. It is endemic to southern Monterey and San Luis Obispo Counties.

A few individuals of straight-awned spineflower were observed by LFR in two locations growing in openings in chaparral vegetation. This species is difficult to find and may be present elsewhere on-site.

Brewer's Red Maids (*Calandrinia breweri*). Brewer's red maids are categorized as CNPS 4.2, a plant with a limited distribution that is fairly threatened in California. It is threatened by development, fire suppression, and grazing activities.

Occasional individuals of Brewer's red maids were observed by LFR along the southern ridge road that bisects the central portion of the site. It may be present elsewhere as well. As a fire-following annual, there may be considerable seed in the seed bank throughout the site.

Trumpet-throated Gilia (*Gilia tenuiflora* subsp. *amplifaucalis*). Trumpet-throated gilia is categorized as CNPS 4.3, a plant with a limited distribution that is not very endangered in

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**TABLE 4.5-4
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Acanthomintha obovata</i> subsp. <i>cordata</i>	Heart-leaved thorn-mint	-/-/4.2	Chaparral, woodlands, grassland; bloom Apr – July	Not observed, suitable habitat present.
<i>Acanthomintha obovata</i> subsp. <i>obovata</i>	San Benito thorn-mint	-/-/4.2	Chaparral, grassland; often on serpentine; bloom Apr – July	Not observed, suitable habitat present, but no serpentine soils present.
<i>Agrostis hooveri</i>	Hoover's bent grass	-/-/1B.2	Central maritime chaparral, woodlands, grasslands; bloom Apr – July	Not observed. Suitable woodlands and grasslands present. Endemic to Central Coast (Santa Barbara and San Luis Obispo Counties).
<i>Amsinckia douglasiana</i>	Douglas' fiddleneck	-/-/4.2	Grassland, woodland; bloom Mar – May	Not observed, suitable habitat present.
<i>Androsace elongata</i> subsp. <i>acuta</i>	California androsace	-/-/4.2	Coastal scrub, chaparral, woodlands; bloom Mar – June	Not observed, suitable habitat present.
<i>Arctostaphylos cruzensis</i>	Arroyo de la Cruz manzanita	-/-/1B.1	Chaparral, coastal scrub, grassland, closed cone conifer forests, woodlands and forests; bloom Dec – Mar	Not observed; suitable chaparral, coastal scrub, or woodland habitat with sandy soils present, however, this species generally grows closer to coast north of Los Osos. Endemic to the Central Coast (San Luis Obispo and Monterey Counties).
<i>A. hooveri</i>	Hoover's manzanita	-/-/4.3	Chaparral, woodlands, closed-cone coniferous forests; bloom Apr – July	Not observed; suitable chaparral habitat present, but found primarily in Santa Lucia Range west of Salinas River. Endemic to Monterey and San Luis Obispo County.
<i>A. luciana</i>	Santa Lucia manzanita	-/-/1B.2	Chaparral, woodlands; bloom Feb – Mar	Not observed; suitable habitat present; usually observed closer to Cuesta Grade, Lopez Canyon. Endemic to San Luis Obispo County. Observed at Santa Margarita Ranch.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>A. morroensis</i>	Morro manzanita	-/-/1B.2	Central maritime chaparral, scrub, woodlands with sandy soils; bloom Dec – Mar	Not observed; suitable chaparral, coastal scrub, or woodland habitat with sandy soils present, however, this species generally grows near Morro Bay. Endemic to San Luis Obispo County.
<i>A. obispoensis</i>	San Luis Obispo manzanita	-/-/4.3	Chaparral, woodlands, closed-cone coniferous forests; bloom Feb – June	Not observed; suitable chaparral habitat present, but found primarily in Santa Lucia Range west of Salinas River. Endemic to Monterey and San Luis Obispo County.
<i>A. pechoensis</i>	Pecho manzanita	-/-/1B.2	Chaparral, coastal scrub, closed cone conifer forests; bloom Nov – Mar	Not observed; suitable chaparral, coastal scrub, or woodland habitat present; known only from Pecho Hills area. Endemic to San Luis Obispo County.
<i>A. pilosula</i>	Santa Margarita manzanita	-/-/1B.2	Chaparral, closed cone conifer forests, woodlands and forests; bloom Dec – Mar	Not observed; suitable chaparral, coastal scrub, or woodland habitat present; known from La Panza Range. Endemic to the Central Coast (San Luis Obispo and Monterey Counties).
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Mile's milk-vetch	-/-/1B.2	Coastal scrub, often on serpentine clay soils; bloom Dec – June	Not observed; suitable coastal scrub habitat with clay soils present. Endemic to Ventura, Santa Barbara, and San Luis Obispo Counties.
<i>Calandrinia breweri</i>	Brewer's red maids	-/-/4.2	Coastal scrub and chaparral, often after fires and in openings	Present in openings in chaparral.
<i>California (Erodium) macrophylla</i>	Round-leaved filaree	-/-/1B.1	Cismontane woodland, grassland in clay soils; bloom Mar – May	Not observed; suitable woodlands and grasslands present.
<i>Calochortus catalinae</i>	Catalina mariposa lily	-/-/4.2	Chaparral, cismontane woodland, coastal scrub, grassland; bloom Feb – May	Not observed; suitable chaparral, coastal scrub, woodlands, and grasslands present. Reported from Santa Margarita Ranch.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Calochortus obispoensis</i>	San Luis mariposa lily	-/-/1B.2	Chaparral, coastal scrub, grasslands, often on serpentine soils; bloom May – July	Not observed; suitable chaparral, coastal scrub, and grasslands present. Known from southern Santa Lucia Range, San Luis Range, and Indian Knob. Endemic to San Luis Obispo County.
<i>Calochortus palmeri</i> subsp. <i>palmeri</i>	Palmer's mariposa lily	-/-/1B.2	Chaparral, forests, meadows, seeps; bloom May – July	Not observed; suitable chaparral, meadows, and seeps present. Known from La Panza Range. Endemic to central California (San Luis Obispo, Santa Barbara, Kern, Ventura, Los Angeles, San Bernardino, and Riverside Counties).
<i>Calochortus simulans</i>	La Panza mariposa lily, San Luis Obispo mariposa lily	-/-/1B.3	Chaparral, coastal scrub, woodlands, lower montane coniferous forests, often on granitic soils, sometimes serpentine soils; bloom Apr – May	Present in openings in chaparral.
<i>Calycadenia villosa</i>	Dwarf calycadenia	-/-/1B.1	Chaparral, cismontane woodlands, meadows and seeps, grassland in rocky, fine soils; bloom May – Oct	Not observed; suitable chaparral, woodland, and grassland habitat present. Reported from La Panza Range. Endemic to Central Coast (Santa Barbara, San Luis Obispo, and Monterey Counties).
<i>Calystegia subacaulis</i> subsp. <i>episcopalis</i>	Cambria morning-glory	-/-/1B.2	Chaparral, woodlands; bloom Apr – May	Not observed; suitable chaparral and woodland habitat present. Reported from Santa Margarita Ranch. Endemic to San Luis Obispo County.
<i>Camissonia hardhamiae</i>	Hardham's suncups (Hardham's evening-primrose)	-/-/1B.2	Chaparral, cismontane woodland in sandy, decomposed carbonate soil, disturbed or burned areas; bloom Apr – May	Not identified. Suitable chaparral and woodland habitat present. Reported from Calf Canyon and Highway 58. Endemic to Central Coast (Santa Barbara and San Luis Obispo Counties). Very likely on property.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Carex obispoensis</i>	San Luis Obispo sedge	-/-/1B.2	Chaparral, coastal scrub, closed cone conifer forests, coastal prairie and grasslands; bloom Apr – June	Not observed; suitable scrub, chaparral, and woodland habitat present, but no serpentine soils observed. Endemic to San Luis Obispo and Monterey Counties.
<i>Castilleja densiflora</i> subsp. <i>obispoensis</i>	San Luis Obispo owl's-clover	-/-/1B.2	Grassland, meadows, and seeps; bloom Apr	Not observed; suitable grassland habitat present. Reported from Santa Margarita Ranch. Endemic to San Luis Obispo County.
<i>Caulanthus coulteri</i> var. <i>lemmonii</i>	Lemmon's jewelflower	-/-/1B.2	Pinyon and juniper woodland, grassland; bloom Mar – May	Not observed; suitable grassland habitat present.
<i>Centromadia parryi</i> subsp. <i>congdonii</i>	Congdon's tarplant	-/-/1B.2	Grasslands and wetland fringes, often in alkaline soils; bloom June – Nov	Not observed; potential grassland and wetland fringe habitat present; known primarily in low areas west of San Luis Obispo.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	Dwarf soaproot	-/-/1B.2	Chaparral in serpentine soils; bloom May – Aug	Not observed; often found on serpentine; suitable habitat present although serpentine soils are absent. Known only west of Salinas River.
<i>Chorizanthe breweri</i>	Brewer's spineflower	-/-/1B.3	Chaparral, coastal scrub, grassland, closed cone conifer forests, woodlands in serpentine soils; bloom May – Aug	Not observed; often found on serpentine; suitable habitat present although serpentine soils are absent. Known only west of Salinas River.
<i>Chorizanthe rectispina</i>	Straight-awned spineflower	-/-/1B.3	Chaparral, coastal scrub, woodlands; bloom May – July	Present in openings in chaparral.
<i>Cirsium fontinale</i> var. <i>obispoense</i>	San Luis Obispo fountain [Chorro Creek bog] thistle	FE/CE/1B.2	Chaparral, coastal scrub, woodlands, grasslands in serpentine seeps and drainages; bloom Feb – July	Not observed; suitable serpentine substrate absent. Endemic to San Luis Obispo County.
<i>Cirsium loncholepis</i>	La Graciosa thistle	FE/CT/1B.1	Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps, grassland in mesic, sandy soils; bloom May – Aug	Not observed; suitable wet areas in coastal habitats absent. Endemic to San Luis Obispo and Santa Barbara Counties.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Deinandra increscens</i> subsp. <i>foliosa</i>	Leafy tarplant	-/-/1B.2	Grassland; bloom June – Sept	Not observed; suitable grassland habitat present. Endemic to Central Coast (Santa Barbara and San Luis Obispo Counties).
<i>Delphinium parryi</i> subsp. <i>blochmaniae</i>	Dune larkspur	-/-/1B.2	Coastal dunes, coastal scrub, central maritime chaparral; bloom Apr – May	Not observed; sandy soils in coastal scrub and coastal dunes absent; central maritime chaparral absent. Endemic to Ventura, Santa Barbara, and San Luis Obispo Counties.
<i>Dudleya abramsii</i> subsp. <i>bettinae</i>	San Luis Obispo serpentine dudleya	-/-/1B.2	Chaparral, coastal scrub, grasslands, often on serpentine soils in bare rocky places; bloom May – July	Not observed; suitable habitat present although serpentine soils absent. Found primarily near coast and known only west of Salinas River. Endemic to San Luis Obispo County.
<i>D. abramsii</i> subsp. <i>murina</i>	San Luis Obispo dudleya	-/-/1B.3	Chaparral, woodlands, rocky places; bloom Apr – June	Not observed; suitable chaparral or woodland habitat present, serpentine substrate absent. Known only west of Salinas River. Endemic to San Luis Obispo County.
<i>D. blochmaniae</i> subsp. <i>blochmaniae</i>	Blochman's dudleya	-/-/1B.1	Chaparral, coastal scrub, grasslands, often on clay or serpentine soils in bare rocky places; bloom Apr – June	Not observed; suitable habitat present. Known only west of Salinas River.
<i>Eriastrum luteum</i>	Yellow flowered eriastrum	-/-/1B.2	Broadleaf upland forest, chaparral, cismontane woodland in sandy or gravelly soil; bloom May – June	Not observed; suitable habitat present (LFR). Observed on-site by Terra-Verde.
<i>Eriogonum nudum</i> var. <i>indictum</i>	Protruding buckwheat	-/-/4.2	Scrub, chaparral, woodlands; bloom May – Dec	Not observed; suitable habitat present.
<i>Eryngium aristulatum</i> var. <i>hooveri</i>	Hoover's button celery	-/-/1B.1	Vernal pools; bloom July	Not observed. Known from Laguna Lake near San Luis Obispo.
<i>Fritillaria agrestis</i>	Stinkbells	-/-/4.2	Grasslands, coastal scrub, chaparral, woodlands, wetlands; bloom Mar – June	Not observed; suitable habitat present.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Fritillaria ojaiensis</i>	Ojai fritillary	-/-/1B.2	Broadleaf upland forest in mesic soils, chaparral, lower montane coniferous forest in rocky soil; bloom Mar – May	Not observed; suitable habitat present.
<i>Fritillaria viridea</i>	San Benito fritillary	-/-/1B.2	Chaparral, serpentine soils; bloom Mar – May	Not observed; chaparral habitat with serpentine substrate absent. Endemic to Central Coast (San Luis Obispo, Monterey, Fresno, San Benito Counties).
<i>Gilia tenuiflora</i> subsp. <i>amplifaucalis</i>	Trumpet-throated gilia, greater yellowthroat gilia, spreading slender-flowered gilia	-/-/4.3	Grasslands, coastal scrub, chaparral, woodlands; bloom Mar – Apr	Present in openings in chaparral.
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	-/-/1B.2	Coastal bluff scrub, coastal scrub, grassland in sandy or serpentine soils; bloom Aug – Sept	Not observed; suitable habitat present, serpentine soils absent, known from near coast.
<i>Horkelia cuneata</i> subsp. <i>puberula</i>	Mesa horkelia	-/-/1B.1	Chaparral, coastal scrub, and woodlands, especially in sandy or gravelly soils; bloom Feb – Sept	Not observed; suitable coastal scrub, maritime chaparral, and woodland habitat present.
<i>Layia heterotricha</i>	Pale-yellow layia	-/-/1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, grassland in alkaline or clay soils; bloom Mar – June	Not observed; suitable habitat present.
<i>Layia jonesii</i>	Jones' layia	-/-/1B.2	Chaparral, grasslands in clay or serpentine soils; bloom Mar – May	Not observed; suitable clay soils present, known only west of Salinas River.
<i>Lupinus ludovicianus</i>	San Luis Obispo County lupine	SOC/-/1B.2	Chaparral, woodlands, grasslands in sandy or sandstone-derived soils; bloom Apr – July	Not observed; suitable habitat present. Reported from Santa Margarita Ranch. Endemic to San Luis Obispo County.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Malacothamnus niveus</i>	San Luis Obispo County bush-mallow	-/-/4.3	Chaparral, coastal scrub, and woodlands, especially in sandy or rocky soils; bloom May – July	Not observed; suitable habitat present.
<i>Malacothamnus palmeri</i> var. <i>involutus</i>	Carmel Valley bush-mallow	-/-/1B.2	Chaparral, cismontane woodland, coastal scrub; bloom May – Oct	Not observed; suitable habitat present. Reported from Cuesta Pass area. Endemic to San Luis Obispo and Monterey Counties.
<i>Malacothamnus palmeri</i> var. <i>palmeri</i>	Palmer's bush-mallow	-/-/1B.2	Chaparral in rocky soils; bloom May – July	Not observed; suitable habitat present. Known only from Santa Lucia Mountains and west of Salinas River. Endemic to San Luis Obispo and Monterey Counties.
<i>Monardella palmeri</i>	Palmer's monardella	-/-/1B.2	Chaparral, woodlands in serpentine soils; bloom May – Sept	Not observed; suitable chaparral or woodland habitat present, serpentine substrate absent. Endemic to Central Coast (San Luis Obispo and Monterey Counties).
<i>Navarretia fossalis</i>	Moran's navarretia	FT/-/1B.1	Chenopod scrub, marsh and swamps, shallow freshwater, playas, vernal pools; bloom Apr – June	Not observed; suitable habitat mostly absent, although wet areas are present. Not listed for San Luis Obispo County in CNDDB.
<i>Navarretia jaredii</i>	Paso Robles navarretia	-/-/4.3	Cismontane woodlands, meadow and seeps, grassland, vernal pools in clay or serpentine soil; bloom Apr – July	Not observed; suitable habitat present. Reported from Santa Margarita Ranch. Endemic to San Luis Obispo County.
<i>Navarretia nigelliformis</i> subsp. <i>radians</i>	Shining navarretia	-/-/1B.2	Cismontane woodlands, grassland, vernal pools; bloom May – July	Present in openings in chaparral.
<i>Piperia michaelii</i>	Michael's rein orchid	-/-/4.2	Coastal bluff scrub, closed cone coniferous forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest; bloom Apr – Aug	Not observed; suitable habitat present. Reported from Santa Margarita Ranch. Endemic to San Luis Obispo County.

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**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Plagiobothrys uncinatus</i>	Hooked popcorn-flower	-/-/1B.2	Chaparral in sandy soils, cismontane woodland, grassland; bloom Apr – May	Not observed; suitable habitat present.
<i>Pseudognaphalium (Gnaphalium) leucocephalum</i>	White rabbit-tobacco	-/-/2.2	Chaparral, cismontane woodlands, coastal scrub, riparian woodland with sandy/gravelly soils; bloom (July) Aug – Nov (Dec)	Not observed; suitable habitat present.
<i>Sanicula maritima</i>	Adobe sanicle	-/CR/1B.1	Chaparral, coastal prairie, grasslands, seeps in clay and serpentine soils; bloom Feb – May	Not observed; potential chaparral and wetland/seep habitat present on-site, but serpentine soils absent. Known only west of Salinas River.
<i>Senecio aphanactis</i>	Rayless ragwort	-/-/2.2	Coastal scrub, chaparral, woodlands; bloom July – Apr	Not observed; potential suitable habitat present.
<i>Sidalcea hickmanii</i> subsp. <i>anomala</i>	Cuesta Pass checkerbloom	-/CR/1B.2	Chaparral, closed cone conifer forests in serpentine soils; bloom May – June	Not observed; suitable habitat of chaparral present, but closed-cone coniferous forest on serpentine substrate absent. Known only from Cuesta Pass area. Endemic to San Luis Obispo County.
<i>Streptanthus albidus</i> subsp. <i>peramoenus</i>	Most beautiful jewel-flower	-/-/1B.2	Chaparral, woodlands, grasslands in serpentine soils; bloom Apr – June	Not observed; suitable serpentine substrate absent.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	-/-/1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, vernal mesic grassland near ditches/streams/springs; bloom July – Nov	Not observed; suitable habitat present.
<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	Saline clover	-/-/1B.2	Marshes, vernal pools, moist grasslands, often in alkaline soil; bloom Apr – June	Not observed; suitable habitat present.

**TABLE 4.5-4 (CONTINUED)
SENSITIVE PLANT SPECIES FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG/CNPS	Habitat/Bloom Period	Occurrence of Element on Project Site
<i>Tropidocarpum</i>	Caper-fruited	-/-/1B.1	Grasslands, often in alkaline soils; bloom	Not observed; suitable grassland habitat present.
<i>capparideum</i>	tropidocarpum		Mar – Apr	Reported from Santa Margarita Ranch.

¹ Species shown in **bold** were identified on the Project site.

FE = Federally Endangered.

SOC = Species of Concern.

CE = State-listed, Endangered.

CT = State-listed, Threatened.

CR = State-listed, Rare.

CNPS = California Native Plant Society.

1B = Plants that are rare, threatened, or endangered in California and elsewhere.

4 = A watch list of plants of limited distribution.

0.1 = Seriously endangered in California.

0.2 = Fairly endangered in California.

0.3 = Not very endangered in California.

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California. It occurs in grasslands and woodlands in Monterey and San Luis Obispo Counties. It is threatened by development, fire suppression, and grazing activities.

A few individuals of trumpet-throated gilia were observed by LFR in openings in chaparral vegetation on-site. This species is difficult to find and may be present elsewhere on-site.

Yellow Flowered Eriastrum (*Eriastrum luteum*). Yellow flowered eriastrum is categorized as CNPS 1B.2, a plant of limited distribution that is fairly threatened in California. It is an annual herb found on sandy or gravelly soils and dry slopes in chaparral, foothill woodland, and mixed evergreen forest in interior portions of the central coast of California from Monterey County to San Luis Obispo County. In San Luis Obispo County, yellow flowered eriastrum occurs in the northern portion of the county from the southern end of Lake Nacimiento to Santa Margarita and Atascadero east to Santa Margarita. It is reportedly threatened by development, and competition from non-native plants. It is endemic to Monterey County and San Luis Obispo County.

Several individuals of yellow flowered eriastrum were observed in the northern portion of the site, both in openings in the chaparral and in roadways.

Hardham's Suncups (*Camissonia hardhamiae*). Hardham's suncups is categorized as CNPS 1B.2, a plant of limited distribution that is fairly threatened in California. It is an annual herb found in chaparral and woodlands that is endemic to Monterey and San Luis Obispo Counties with fewer than twenty known occurrences. It has been reported from Calf Canyon and Highway 58, and within the Project property boundary. Hardham's suncups is an annual member of the evening-primrose family (Onagraceae). This species is very difficult to distinguish from common suncups (*Camissonia micrantha*), which occurs within the Project, since the primary distinguishing feature is the shape of the pollen grains (four to five angled in Hardham's evening primrose) and requires a high-powered microscope. Hardham's suncups is threatened by residential development, energy development, grazing, recreation, road construction, and mining.

No known pollen samples were collected during assessment surveys, therefore it is assumed that any common suncups found throughout the Project Site may be Hardham's suncups.

Common Wildlife Species

Common wildlife species are native animals that are not legally protected or classified as sensitive or rare at a local, state, or federal level. The location, size, and relatively undisturbed habitats of the site support a diverse suite of common wildlife species. Species that were observed, have the potential to occur on-site, or in the immediate vicinity are listed by LFR (2009, in Appendix B). Additional information concerning wildlife species seen during the LFR surveys is also included in the LFR report (2009).

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Sensitive Wildlife

The site provides suitable habitat for several sensitive wildlife species; all sensitive wildlife with potential to occur, their status and location at the Project can be found below in Table 4.5-5. Information provided from the LFR report was updated and modified, as necessary, to provide the most up to date and accurate information (CDFG 2011 and CDFG 2012).

Wildlife surveys were conducted at different times of day and on different days between April and July 2009. Surveys relied on direct observation, audible calls, and signs (e.g., tracks, burrows, scat, nests, etc.). Some of the sensitive species listed in the CNDDDB for the Santa Margarita and surrounding quadrangles are not discussed or only briefly discussed below due to the lack of species-specific habitat requirements present on the site. Species such as the steelhead trout (*Oncorhynchus mykiss irideusi*) and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) are examples of species whose habitat requirements are not met by the existing conditions on the site although potentially suitable habitat for both of these species is found in the nearby Salinas River.

Native birds and their active nests are protected under the Migratory Bird Treaty Act (MBTA). This includes all of the native birds observed on the site and listed in Table 4.5-5 with the exception of the European starling (*Sturnus vulgaris*) because this species is not native to North America. Numerous species of native birds are expected to be found on-site throughout the course of the year though only a subset of these species and a small fraction of the total number of individuals will breed on-site. Birds of prey are also protected under the California Fish and Game Code (Section 3503.5) regardless of the legal status of the species. Several species may utilize the site for foraging, migration, and as a potential breeding territory.

The site offers suitable foraging habitat and potential roosting locations for bat species known to occur in the region. In particular, rock outcroppings on the site may provide potential roosting locations for bats. Several sensitive bat species including the Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*) and western red bat (*Lasiurus blossevillii*) were documented in the surrounding quadrangles.

The following descriptions identify sensitive wildlife species reported from the Santa Margarita Quadrangle or neighboring quadrangles that are known to occur or potentially occur on the site.

Western Spadefoot (*Spea hammondi*) – CSC. The western spadefoot (toad) prefers habitat where the soil is sandy or gravelly, and vegetation is short and open. Typically, habitat types include grasslands, pine-oak woodlands, open chaparral, and scrubland. LFR found no aquatic habitat on the site suitable for breeding by the western spadefoot. Upland habitat on the site is considered marginally suitable for this species. The western spadefoot was not observed during LFR surveys.

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**TABLE 4.5-5
SENSITIVE WILDLIFE FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG	Occurrence of Element on Project Site
Invertebrates			
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT/CSC	Unlikely to occur on the Site/No suitable vernal pool habitat present
<i>Danaus plexippus</i>	Monarch butterfly	-/-	Species may occur intermittently on the Site/no winter roost locations known to occur on the Site
<i>Linderiella occidentalis</i>	California fairy shrimp	-/-	Unlikely to occur on the Site/No suitable vernal pool habitat present
<i>Polyphylla nubila</i>	Atascadero June beetle	-/-	Not likely to occur on the Site/No suitable dune habitat present
<i>Trimerotropis occulens</i>	Lompoc grasshopper	-/-	Status and habitat requirement information limited for this species
Fish			
<i>Oncorhynchus mykiss irideus</i>	Steelhead trout	FT/CSC	No tributaries to the Salinas River occur on the site that are suitable for this species
Amphibians			
<i>Ambystoma californiense</i>	California tiger salamander	FE/CSC	No suitable breeding pools present and upland habitat is poor for this species/species not likely to occur on-site
<i>Rana aurora draytonii</i>	California red-legged frog	FT/CSC	No suitable aquatic habitat and upland habitat poor for this species/species not likely to occur on-site
<i>Spea hammondi</i>	Western spadefoot toad	-/CSC	No suitable breeding pools present and upland habitat poor for this species/species not likely to occur on-site
<i>Taricha torosa torosa</i>	Coast Range newt	-/CSC	Tributaries of the Salinas River through the site may provide potential habitat for this species
Reptiles			
<i>Anniella pulchra</i>	Silvery legless lizard	-/CSC	No suitable coastal scrub or other habitat containing loose sandy soils present for this species
<i>Clemmys marmorata pallida</i>	Southwestern pond turtle	-/CSC	Marginally suitable upland habitat present/no perennial aquatic habitat present for this species

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**TABLE 4.5-5 (CONTINUED)
SENSITIVE WILDLIFE FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG	Occurrence of Element on Project Site
<i>Phrynosoma coronatum</i>	Coast horned lizard	-/CSC	Present. Suitable chaparral and oak woodland habitat present for this species
Birds			
<i>Gymnogyps californianus</i>	California condor	FE/CE	Suitable foraging habitat present on the site for this species
<i>Aquila chrysaetos</i>	Golden eagle	-/FP	Species likely to occur intermittently on the site while foraging/not likely to nest on the site
<i>Elanus leucurus</i>	White-tailed kite	-/FP	Habitat present on the site may provide suitable foraging and nesting opportunities for this species
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	Candidate/ CE	Potential willow riparian habitat occurs near the site along the Salinas River. Species not expected to occur on the Site
<i>Athene cucularia</i>	Western burrowing owl	BCC/CSC	Limited grassland habitat present for this species
<i>Calypte costae</i>	Costa's hummingbird	BCC/-	Chaparral on the site may provide suitable foraging and nesting opportunities for this species
<i>Picoides nuttallii</i>	Nuttall's woodpecker	BCC/-	Oak woodlands on the site may provide suitable foraging and nesting opportunities for this species
<i>Progne subis</i>	Purple martin	-/CSC	This migratory species may occur intermittently on the Site while foraging/nests in tree hollows which are likely to occur on-site
<i>Baeolophus inornatus</i>	Oak titmouse	BCC/-	Present. Oak woodlands on the site provide suitable foraging and nesting opportunities for this species
<i>Ammodramus savannarum</i>	Grasshopper sparrow	-/CSC	Limited grassland habitat present for this species
<i>Agelaius tricolor</i> (nesting colony)	Tricolored blackbird	BCC/CSC	No suitable marsh or other aquatic habitat on-site for this species
<i>Carduelis lawrencei</i> (nesting)	Lawrence's goldfinch	BCC/-	Present. Habitat present on the site may provide suitable foraging and nesting opportunities for this species
Mammals			
<i>Antroxous pallidus</i>	Pallid bat	-/CSC	Suitable habitat present
<i>Bassariscus astutus</i>	Ringtail cat	-/FP	Suitable habitat present

**TABLE 4.5-5 (CONTINUED)
SENSITIVE WILDLIFE FOUND IN AND AROUND THE PROJECT SITE¹**

Name	Common Name	USFWS/ CDFG	Occurrence of Element on Project Site
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-/CSC	Suitable habitat present
<i>Eumops perotis californicus</i>	Western mastiff bat	-/CSC	Suitable habitat present
<i>Lasiurus blossevillii</i>	Western red bat	-/CSC	Suitable habitat present
<i>Taxidea taxus</i>	American badger	-/CSC	Suitable chaparral and oak woodland habitat present for this species
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	FE/CT	Limited grassland habitat on the site for this species

¹ Species shown in **bold** were identified on the Project site.

FE = Federally Endangered.

FT = Federally Threatened.

BCC = Federal Bird of Conservation Concern.

CE = State-listed, Endangered.

CT = State-listed, Threatened.

CSC = California Species of Concern.

FP = California Fully Protected.

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There is no suitable aquatic breeding habitat on the site and upland habitat on the site is considered to be only marginally suitable for this species.

Coast Range Newt (*Taricha torosa*) – CSC. The Coast Range newt is a terrestrial newt that summers in moist habitats under woody debris, or in rock crevices and animal burrows, but can sometimes be seen wandering overland in moist habitat or conditions any time of the year. The coast range newts breeds in ponds, reservoirs, and sluggish pools in streams usually beginning with the first heavy rains of December. The coast range newt was not observed during LFR surveys.

The main drainage corridor through the project site provides marginal habitat for the coast range newt.

Western Pond Turtle (*Emys marmorata*) – CSC. The western pond turtle inhabits permanent or nearly permanent bodies of water in a variety of habitat types. Western pond turtles are closely associated with perennial water bodies such as ponds, lakes, and streams. The main drainage through the site is an ephemeral system that is essentially dry throughout most of the year. However, southwestern pond turtles are known to travel away from perennial water bodies to lay their eggs and to hibernate.

The ephemeral drainage on the site provides marginal to poor habitat for the southwestern pond turtle and the species could potentially utilize the drainage for dispersal purposes though it does not connect to suitable areas and only leads from the Salinas River up into the hills. Potential for the southwestern pond turtle to occur on the site is considered low. Outside the proposed mining boundary, a pond has been created at the existing residence immediately adjacent to the Salinas River. The pond may present suitable habitat though the conditions and management of the pond are unknown.

Coast Horned Lizard (*Phrynosoma blainvillii*) – CSC. The coast horned lizard is found in a variety of habitats including grassland, oak woodland, and maritime chaparral. The coast horned lizard requires loose sandy soils, preferably in the presence of low shrubs that provide shade and cover from predators. Coast horned lizards adults and juveniles were observed at the site on several occasions by LFR and by Terra-Verde.

The site offers excellent habitat for this species and likely supports a large population.

Silvery Legless Lizard (*Anniella pulchra pulchra*) – CSC. The silvery legless lizard is a pencil sized fossorial species reaching a length of approximately seven inches (18 centimeters) and spending much of its time in underground burrows. The silvery legless lizard was not observed during LFR surveys. Chaparral and oak woodland habitat on the site provides limited sandy soil in association with low shrub cover.

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The site has moderate to poor habitat for the silvery legless lizard. Potential for the silvery legless lizard to occur on the site is considered low to moderate in the well-developed soils on the south side of the site facing Highway 58.

Golden Eagle (*Aquila chrysaetos*) – BCC, FP Species. The golden eagle is a fairly common raptor preferring open country of foothills and mountainsides. Nests are typically built in tall trees as well as on cliffs and power line towers. Golden eagles are commonly observed in San Luis Obispo County.

The site presents suitable foraging habitat for the golden eagle; the species is not expected to nest on the site. Potential for the golden eagle to occur at the site on a consistent basis is considered low to moderate.

White-tailed Kite (*Elanus leucurus*) – FP Species. The white-tailed kite depends upon relatively undisturbed oak woodland, grassland, and/or coastal sage scrub habitat for successful breeding. White-tailed kite habitat often has a stretch of riparian corridor in which to nest (particularly cottonwoods, but including eucalyptus, willows, and live oaks), and adjacent open fields in which to hunt. Habitat existing on the site is considered of sub-optimal suitability to support the white-tailed kite. The white-tailed kite was not observed on the site during LFR surveys.

Conditions existing at the site are considered to be only marginally suitable for this species. Potential for the white-tailed kite to utilize the site on a consistent basis is considered low.

Burrowing Owl (*Athene cunicularia hypugaea*) – BCC, CSC. The burrowing owl inhabits open country of grasslands, prairies, and fields. It often uses the burrows of ground squirrels and other small mammal species for shelter and nesting. The burrowing owl was not observed during LFR surveys or in the spring time surveys by Terra-Verde.

The often steep terrain and dense chaparral habitat on the site is not conducive to the western burrowing owl. The site has relatively poor habitat suitability for this species. Potential for the western burrowing owl to occur on the site is considered low.

Costa's Hummingbird (*Calypte costae*) – BCC. Costa's Hummingbird is a fairly common summer visitor to southern California. Costa's Hummingbird favors desert and semi-desert, arid brushy foothills and chaparral, in migration and winter also in adjacent mountains and in open meadows and gardens. The Costa's Hummingbird was not observed during LFR surveys or the Terra-Verde surveys.

The chaparral habitat on the site presents suitable foraging and nesting habitat for the Costa's Hummingbird. Potential for the Costa's Hummingbird to occur at the site on a consistent basis is considered moderate.

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Nuttall's Woodpecker (*Picoides nuttallii*) – BCC. Commonly found in arid to mesic woodlands, preferring oak woodlands, although they also occur in riparian sites and chaparral in the most southern parts of the range. The Nuttall's woodpecker was not observed during LFR surveys or the Terra-Verde surveys.

The oak woodland habitat on the site presents suitable foraging and nesting habitat for the Nuttall's woodpecker. Potential for the Nuttall's woodpecker to occur at the site on a consistent basis is considered moderate to high.

Purple Martin (*Progne subis*) – CSC. The purple martin is the largest swallow in California, with a wingspan of approximately 18 inches, pointed wings and narrowly forked tail. Purple martins are known to nest within a few miles of the project site. The CNDDDB reports 10 plus nesting purple martins along Trout Creek west of Pozo Road on Santa Margarita Ranch property in 2003.

The area of the property that would be developed as a quarry lacks a developed riparian tree corridor and is generally considered sub-optimal for use by purple martins for nesting due to the lack of tree density and overall size compared to trees in neighboring locations along the Salinas River and Trout Creek at the southwestern corner of the Oster property and farther to the west, respectively. The quarry site and surrounding lands could provide foraging habitat for the purple martin.

Oak Titmouse (*Baeolophus inornatus*) – BCC. The oak titmouse inhabits oak or oak-pine woodlands of the Pacific slope of California. It is one of the most common and characteristic birds of the oak woodlands in California. The oak titmouse was observed during LFR surveys.

Oak woodlands on the site provide suitable foraging and nesting opportunities for this species.

Grasshopper Sparrow (*Ammodramus savannarum*) – CSC. The grasshopper sparrow prefers areas with significant grass cover and a few scattered shrubs for perching. They don't use habitats with dense shrub cover. During migration and winter, they will use many types of open fields. The grasshopper sparrow was not observed during LFR surveys or the Terra-Verde surveys.

The habitat on the site presents limited foraging and nesting opportunities for this species. Potential for the grasshopper sparrow to occur at the site on a consistent basis is considered low.

Tricolored Blackbird (*Agelaius tricolor*) – BCC, CSC. The tricolored blackbird is endemic to California. It is found in freshwater marshy areas, farm and other ponds, where cattails,

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tules, and rushes are present. The tricolored blackbird was not observed during LFR surveys or the Terra-Verde surveys.

There is a small pond located adjacent to the site on the existing residence parcel (to the west) that could provide suitable habitat for the tricolored blackbird. Potential for the tricolored blackbird to occur on the site is considered low.

Lawrence's Goldfinch (*Carduelis lawrencei*) – BCC. The Lawrence's goldfinch inhabits arid woodlands. It breeds from Northern California to Baja California in the Coast Ranges and the foothills of the Sierra Nevada. The Lawrence's goldfinch was observed during LFR surveys.

Oak woodlands and riparian areas on the site provide suitable nesting opportunities for this species.

American Badger (*Taxidea taxus*) – CSC. The American badger is found in open grassland, coastal scrub, chaparral, and oak woodland. No evidence of American badgers, badger activity, dens or mounds were observed during the surveys by LFR. American badgers are known to occur in San Luis Obispo County.

The site has marginally suitable habitat for the American badger. Small mammals at the site provide potential foraging opportunities for the badger. Potential for the American badger to occur on the site is considered moderate to good.

Ringtail Cat (*Bassariscus astutus*) – FP Species. Ringtail cats range includes the majority of California. Due to its secretive nature, population and distribution figures are difficult to obtain. However, occurrence records indicate ringtails are widely distributed in California and are believed to be a common to uncommon resident. Ringtails are found in various riparian habitats and in brush stands of most forest and shrub habitats from sea level to approximately 8,800 feet. Its principal habitat requirements seem to be den sites among boulders or in hollows of trees with sufficient food in the form of rodents and other small animals. Ringtails are usually not found more than one-half mile from permanent water.

This non-migratory species is nocturnal and active year-round. Foraging on the ground, among rocks or in trees near water, their diet is primarily carnivorous, mainly rodents (woodrats and mice) and rabbits. Ringtails tend to be seasonal foragers; in summer and fall their diet consists of mostly of insects, while birds, mammals and carrion are eaten in the spring and winter. They are also known to eat reptiles, eggs, fruits and nuts. Mating season is in late winter and a litter of three or four young are born in May or June. Dens and nests are located in hollow trees, logs, snags, cavities in talus and other rocky areas, or abandoned burrows or woodrat nests.

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Due to the mix of habitats and proximity to the Salinas River, the site has suitable habitat for the ringtail cat. Small mammals, birds, and fruit at the site provide potential foraging opportunities for the ringtail. Potential for the ringtail to occur on the site is considered moderate to good.

Monarch Butterfly (*Danaus plexippus*) – CNDDDB Sensitive Species. The monarch butterfly does not have federal or state listing status, but is included as a sensitive species in the CNDDDB. These butterflies frequent grasslands, prairies, meadows, and wetlands, but avoid dense forests. In the winter, monarchs cluster together in large numbers in eucalyptus, cypress, and Monterey pine trees, often on the edge of open areas.

The site lacks suitable stands of eucalyptus, Monterey pine or other appropriate trees with canopies that provide typical roost site conditions for wintering monarch butterflies. Potential for a monarch butterfly roost to occur on the site is considered very low.

Threatened and Endangered Species

No state or federally listed threatened or endangered plants or wildlife were observed at the site during the 2009 LFR or 2011 Terra-Verde surveys. The CNDDDB does not document any records for threatened or endangered plants or wildlife within one-mile of the site.

Threatened and Endangered Plants

The following species are State or federally listed plant species reported from the Santa Margarita Quadrangle or neighboring quadrangles.

There are two federally endangered and one federally threatened plant species found near the Project site. The federally endangered, state-listed endangered San Luis Obispo fountain (Chorro Creek bog) thistle was not observed at the site, suitable habitat which includes serpentine substrate is absent. The federally endangered, state-listed threatened La Graciosa thistle was not observed at the site, and suitable wet coastal habitat is absent. Moran's navarretia, a federally threatened species was not observed at the site, and suitable habitat is mostly absent (vernal pools, marsh, swamps, freshwater playas), although wet ephemeral drainages are present which have limited potential to support this species.

There are two state-listed rare species known to occur near the Project with potential to occur on-site. Cuesta Pass checkerbloom was not observed at the site, but suitable chaparral habitat is present, although this species is only known to occur in the Cuesta Pass area. Adobe sanicle was not observed at the site, but suitable chaparral, wetland/seep habitats are present on-site.

Threatened and Endangered Wildlife

The species accounts below (as presented in the LFR report contained in Appendix B) represent state or federally listed wildlife species reported from the Santa Margarita Quadrangle or neighboring quadrangles that are known to occur or potentially occur on the site.

San Joaquin Kit Fox (*Vulpes macrotis mutica*) – FE, CT. The San Joaquin kit fox is the smallest member of the canid family in North America. This species occupies grasslands and scrublands often in association with agricultural lands, oil fields, irrigated pastures, orchards, vineyards, and grazed lands. They can also be found in oak woodland, alkali sink scrubland, and alkali meadow communities.

The CNDDDB indicates sightings of the San Joaquin kit fox in the Templeton Quadrangle and surrounding quadrangles. However, the predominantly chaparral habitat on the site is not suitable for this species. Kit fox dens or other potentially suitable burrows were not observed on the site by LFR or by Terra-Verde. The Kit Fox Habitat Evaluation Form for San Luis Obispo, Monterey and San Benito Counties was not required for this site because the site is outside of recognized kit fox habitat mitigation areas in San Luis Obispo County. The probability of San Joaquin kit fox occurring even occasionally on the site is considered very low.

California Condor (*Gymnogyps californianus*) – FE, CE. The California condor is the largest raptor in California with a wingspan of up to nine feet. Condors occur primarily in foothills and mountains at low and medium elevations, particularly in areas with canyons and other rocky areas with suitable cliffs for nesting and roosting. They mainly forage over grasslands and can cover great distances during daily activities.

The California condor was not observed on or over the site during LFR surveys or the Terra-Verde surveys. Conditions existing at the site are considered to be only marginally suitable for this species. Potential for the condor to utilize the site on a consistent basis is considered very low.

Steelhead Trout (*Oncorhynchus mykiss irideus*) – FT, CSC. The south-central California Coast steelhead evolutionarily significant unit (ESU) occupies rivers from the Pajaro River, Santa Cruz County to Point Conception (Santa Barbara County) in the south. Steelhead are anadromous fish that require unpolluted, cool, unobstructed conditions in coastal rivers and streams to complete their life cycle. The nearby Salinas River provides potential habitat for steelhead trout. The drainage on the site is part of the Salinas River watershed but is not conducive to steelhead trout mainly due to its ephemeral nature and a lack of sufficient surface water connectivity to the Salinas River.

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The central drainage on the site is not a documented steelhead creek and is not included as part of the designated critical habitat for the south central California Coast steelhead (ESU). The ephemeral drainage in the location of the site rarely conveys surface water and does not provide suitable habitat for steelhead. Suitable habitat for steelhead does not exist within the area that would be disturbed by the project' mining operations. The nearest potential habitat for steelhead is along the Salinas River which crosses the southwest corner of the Oster property, approximately 1,000 feet southwest of the proposed quarry.

California Red-legged Frog (*Rana draytonii*) – FT, CSC. The California red-legged frog (CRLF) is a comparatively large frog, though not as big as the bullfrog, and measures up to 5.6 in. (13.1 cm) in length. The California red-legged frog's historical range extended from the vicinity of Point Reyes National Seashore, Marin County, California, coastally, and from the vicinity of Redding, Shasta County, California, inland, south to northwestern Baja California, Mexico (United States Fish and Wildlife Service [USFWS] 2000). The California red-legged frog reside in and around deep, cold, still or slow moving water of ponds, reservoirs, marshes, streams, and other typically permanent bodies of water, especially where cattails or other plants provide good cover (Stebbins 1985). Such habitat exists along portions of the Salinas River that crosses the southwest corner of the Oster property, and in the ranch pond and seasonal pools in Moreno Creek along the southern portion of the Oster property (assuming bullfrogs are not established at these locations). These areas are about 500 feet from the southern portion of the proposed quarry, and are separated from it by the house and ranch complex and SR 58. Within the quarry site itself only the Phase 2 main drainage, which flows westward into the Salinas River appears to have the potential to support CRLF. This drainage is about 1,600 feet from the nearest point of the Salinas River, and is separated from it by a ridgeline that rises approximately 300 feet above the river elevation. From the proposed quarry site, the main drainage flows approximately 1.5 miles westward to join the Salinas River inside the Hanson Santa Margarita Quarry property.

LFR investigated the main drainage through the quarry site on May 5, 2009. Part of the investigation was to assess the existing habitat suitability for CRLF. Two very small pools of water covering approximately one square foot and one half-inch in depth were found in the entire drainage during the survey. LFR determined that the characteristics of the drainage were insufficient to support CRLF mainly due to the lack of plunge pools and locations where surface water could collect in sufficient amounts to provide suitable depth and cover for CRLF. In the subsequent surveys by Terra-Verde, CRLF was also not found and the conditions in this main drainage on the quarry site were drier than reported during the LFR surveys. It should be noted that a formal USFWS protocol level survey for the CRLF has not been conducted. This procedure involved two steps: first a brief habitat assessment to determine the proximity of suitable habitat and the likelihood of presence, followed by more extensive surveys in habitat areas (U.S. Fish and Wildlife Service 2005). Because of the mobility of CRLF, the conclusions of a U.S. Fish and Wildlife protocol are good only for two years. Due to the relatively poor habitat potential of the main drainage within the proposed

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quarry site, and the length of time between the initial LFR survey work and anticipated permitting and development of the project, not following the U.S. Fish and Wildlife protocol at the time of the initial survey was justified.

In summary, the California red-legged frog was not observed by LFR during routine wildlife surveys or by Terra-Verde in subsequent surveys. The central ephemeral drainage through the quarry site provides the only potential habitat in the area that will be disturbed by the project but does not provide sufficient plunge pools or other areas where water could collect in sufficient amounts and durations to provide suitable habitat for CRLF. Thus, the potential for CRLF to occur on the quarry site is low. The species is likely present along the Salinas River and Moreno Creek corridors, however, and it is capable of moving relatively large distances (over one mile) between suitable habitat areas.

California Tiger Salamander (*Ambystoma californiense*) – FT, CT, CSC. Information in this paragraph is adapted from the Federal Register: 65 FR 57242 (Endangered and Threatened Wildlife and Plants; final rule to List the Santa Barbara County distinct Population of the California Tiger Salamander as Endangered; Final rule) and from Western Reptiles and Amphibians (Stebbins 1985). The California tiger salamander inhabits grassland and open woodland areas, breeding in the still or slow-moving waters of vernal pools, reservoirs, and streams. Adults spend the majority of their time in burrows of ground squirrels and pocket gophers, emerging during the first significant rains of the wet season and possibly traveling as far as 1.2 miles (1.9 km) to reach breeding areas. There is one record in the CNDDDB for CTS found among the nine quadrangles queried for this report. The record is from 1939 and was reported occurring one mile north of San Luis Obispo. California tiger salamanders are considered extirpated from the location according to the CNDDDB. The upland habitat on the site (predominantly chaparral) is not considered conducive to CTS and there are no known CTS breeding ponds within 1.2 miles of the site (the distance recognized by USFWS as the maximum dispersal distance traveled by CTS away from a breeding site). Potential for CTS to occur on the site is very low.

4.5.4 Assessment Methodology

A biological/botanical assessment was prepared (Sensitive Species and Habitat Survey for the Las Pilitas Rock Quarry, LFR, October 2009) which provides a detailed description of the site, the biological resources likely to be found in the project area, observations and surveys conducted to confirm the presence of any special status biological resources on the site, the possible impacts to these resources that could result from the proposed project and mitigation measures recommended to reduce impacts to less than significant levels. Additional botanical surveys of the project area were conducted by Terra-Verde on May 12 and July 1, 2011 and summarized the surveys in a letter report dated July 12, 2012.

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In the preparation of the EIR, the LFR biological/botanical assessment was peer reviewed by URS, an independent, third party, qualified biologist. The assessment was supplemented and updated with further industry research by URS as needed to provide a detailed biological impact assessment of the proposed project. The overall results of this impact assessment are presented in detail in LFR (2009), and summarized in Section 4.5.6, below.

The California Natural Diversity Database (CDFG 2012) was queried to determine all sensitive species within the Project Area. Figure 4.5-3, “CNDDDB Results within a 1 Mile Radius” shows all documented occurrences within the Project Area with a one-mile buffer to capture records that were near the site and ensure that potential occurrences of sensitive biological resources were included in evaluations of indirect impact. The one mile radius from the project site defines the cumulative study area for the biological resources.

Direct and indirect impacts were assessed for all biological resources. Direct impacts were defined as those impacts that would cause the removal of habitat or the demise of a plant or animal. Indirect impacts were defined as those impacts such as dust, noise and night lighting that would degrade a habitat or disturb plants or animals without causing mortality.

Due to the nature of the project almost all impacts associated with the project were considered permanent. Temporary impacts were defined as impacts to biological resources that were limited to less than 24 months in duration. For instance, if a laydown area was to be developed and then restored within 24 months, those impacts would be considered temporary. However, due to the nature of the on-going operations and the proximity of “reclaimed” lands associated with the proposed restoration plan, none of these restored areas would be fully functional habitat until the mining operations have been permanently concluded.

Impacts associated with operations were conservatively assumed to preclude any biological use of the Project site. For the duration of the mining operations, it was assumed that there would be no biological value associated with the Project Site. This conservative approach ensured that the impacts were not underestimated.

Significance criteria for biological resources was derived from general field surveys and focused botanical surveys, consultation with knowledgeable local biologists, the San Luis Obispo County Environmental Checklist, previous environmental impact assessments and from the CEQA Guidelines. Resources used for assessing project related impacts included aerial photographs, topographic maps, CNDDDB database, previous biological report findings, field survey results, scientific literature, and professionally accepted flora manuals and wildlife field guides.

4.5.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Biological Resources within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Result in a loss of unique or special status species or their habitats; and/or
- b. Reduce the extent, diversity or quality of native or other important vegetation; and/or
- c. Impact wetland or riparian habitat; and/or
- d. Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife.

4.5.6 Project Impacts and Mitigation Measures

The impacts to biological resources through the construction and operation of the proposed Quarry project are expected to affect the broad categories of: native habitats, sensitive habitats, and native plants and wildlife. Each of the four Significance Criteria presented in the County's Initial Study are described and analyzed in greater detail below, along with project effects and impacts, as well as proposed avoidance, minimization, and mitigation measures.

The proposed surface mine will involve the grading of approximately 41 acres of presently undisturbed land within the project boundaries and the removal of all native vegetation on this acreage. Biological resources affected by these actions include: oak woodlands, vernal swales, rare plants and sensitive wildlife, and nesting birds. Please note that the CEQA Guidelines definition of "Mitigation" includes "Compensating for the impact by replacing or providing substitute resources or environments" (Section 15370(e)). With permanent conservation of a larger area of land (69 acres) of equal or higher habitat value, combined with identified mitigation measures to avoid or minimize direct impacts to sensitive and other species, all impacts to biological resources would be reduced to a less than significant level. The impact analysis which follows is presented in the context of these resources.

Effect on Rare Plants

Development of the proposed quarry will remove approximately 41 acres of natural vegetation, most of which will be Chaparral vegetation with few sensitive plant species. No State or Federally threatened or endangered plant species are expected to be impacted by the development or operation of the proposed Project. Seven plant species considered sensitive or of local concern are known or expected to be within the disturbance area of the proposed project. These include: Shining Navarretia; La Panza Mariposa Lily; Straight-awned

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Spineflower; Brewer’s Red Maids; Trumpet-throated Gilia; Yellow Flowered Eriastrum and Hardham’s Suncups. Some of these individuals or populations will be physically removed during construction and other individuals or populations will be adversely impacted by the operation of the mining activity. Populations of these species will also be preserved within the 69 acres of open space area designed within the project, which would include Chaparral habitat similar in quality to that removed by the project as well as other sensitive vegetation types. Because none of these species are listed as threatened or endangered by Federal or State agencies, the loss of some individuals caused by the project will be adequately mitigated by the preservation of suitable habitat and populations of these species in permanent open space.

Description of Impact	Mitigation Measure	Residual impact
<p>IMPACT BIO-1: Effect on rare plants. The quarry project, through construction and/or ongoing quarry operations, will result in the loss of populations of seven plant species considered sensitive by the CNPS or of concern to San Luis Obispo County. This loss is considered a potential significant impact.</p>	<p>MM BIO-1: Effect on rare plants. Prior to issuance of the Notice to Proceed for the quarry project, the applicant/quarry operator shall identify and permanently preserve 69 acres of habitat land on-site, consistent with the areas shown in Figure 4.5-1. To ensure this preservation, the applicant shall record an open space easement that protects the habitat in perpetuity. The open space easement shall be controlled by a qualified conservation organization approved by the County. Potential conservation organizations include but are not limited to: The Nature Conservancy, San Luis Obispo Land Conservancy, or Greenspace.</p>	<p>Less than significant</p>

Effect on Wildlife Species

No State or Federally threatened or endangered wildlife species are expected to be impacted by the development or operation of the proposed Project. Therefore, it will not be necessary to obtain any special take permits for any species from the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. Several animals considered California Species of Concern by the state Department of Fish and Wildlife are known or expected to be within the disturbance area of the proposed quarry. These include: Western spadefoot toad, silvery legless lizard, southwestern pond turtle, coast horned lizard, and American badger. In addition, three bird species considered Federal Birds of Conservation Concern by the U.S. Fish and Wildlife Service are likely to be affected by the project. These are: Nuttall’s woodpecker, oak titmouse, and Lawrence’s goldfinch. Habitat for some of these species will be physically removed during construction and quarrying that will disturb 41 acres of Chaparral habitat and remove oak trees within the proposed quarry site. The loss of habitat and indirect effects related to night-lighting, noise, and increased activity are the primary indirect impacts to wildlife. Preservation within permanent open space of 69 acres of habitat

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similar to that which will be lost by the proposed project, including areas well-removed from quarry activities, will provide mitigation of these effects. The CEQA Guidelines definition of “Mitigation” includes “Compensating for the impact by replacing or providing substitute resources or environments” (Section 15370(e)). Additional measures to reduce effects to all bird species, including the sensitive ones listed above are discussed in BIO-4 below.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-2: Effect on Wildlife Species. Habitat for several animals considered Species of Special Concern by the California Department of Fish and Wildlife, and Birds of Conservation Concern by the U.S. Fish and Wildlife Service will be directly removed or affected by the quarry project.	MM BIO-2: Effect on Wildlife Species. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-2.	Less than significant

Effect on Ringtail Cat

Due to the mix of habitats and proximity to the Salinas River, the site has suitable habitat for the ringtail cat. This is a Fully Protected species under California law. Small mammals, birds, and fruit at the site provide potential foraging opportunities for the ringtail cat, which may be present on the property year round. During the non-breeding season, the Ringtail Cat is mobile and can avoid vehicles and other equipment. The breeding season (March 1 through June 30) is the time when individuals would be most susceptible to harm. The clearing of vegetation and grading for the proposed quarry—particularly the removal of oak trees and vegetation along the main drainage of the quarry—could lead to disturbance of den sites and loss of individuals. This potential impact can be avoided through a combination of measures that preserve suitable habitat (MM BIO-1 above) within the property and additional steps to avoid harm to individuals.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-3: Effect on Ringtail Cat. The quarry project, through construction and/or ongoing quarry operations, may adversely impact the ringtail cat, which is a California Fully Protected Species. Specifically, vegetation clearing during the ringtail cat breeding season (March 1 through June 30) has the potential to result in the mortality of ringtail cats, which would be a significant impact.	MM BIO-3: Effect on Ringtail Cat. If vegetation clearing will occur during the ringtail cat breeding season (March 1 through June 30), a qualified biologist will conduct focused searches for potential dens within areas that are proposed for clearing and grading. Any active dens will be protected with a suitable buffer based on location, and types of activity with the area as determined by the qualified biologist. Once the young have left the den or the breeding attempt has failed, as determined by a qualified biologist, normal vegetation clearing activities may resume.	Less than significant

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Effect on Birds

Native birds are not likely to be directly impacted by the development of the quarry or operational activities, since they are mobile and can avoid vehicles and equipment. Their nests, however, are very vulnerable to disturbance and would be impacted by vegetation clearing and grading during quarry activities. Native birds are protected under the Migratory Bird Treaty Act and California Department of Fish and Game Code Section 3513. Any avoidable loss of native bird nests would be considered a significant impact. This impact can be avoided or reduced through a combination of timing and the conduct of pre-construction surveys with restrictions on clearing and grading activities. Implementation of these measures will reduce the impact to a level below significance.

Description of Impact	Mitigation Measure	Residual impact
<p>IMPACT BIO-4: Effect on Birds. The quarry project, through construction and/or ongoing quarry operations, may adversely impact native birds and their active nests, which are protected under the Migratory Bird Treaty Act (MBTA), administered by the US Fish and Wildlife Service. Specifically, vegetation clearing during the bird breeding season (March 1 through June 30) has the potential to result in the mortality of eggs or nestlings of native birds.</p>	<p>MM BIO-4: Effect on Birds. If vegetation clearing will occur during the bird breeding season (March 1 through June 30), a qualified biologist will conduct focused searches for nesting birds of the affected areas and adjacent areas within 200 feet of the affected areas, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained. All active native bird nests will be protected with a suitable buffer based on the species of bird, nest location, and types of activity with the area as determined by the qualified biologist. Once the young have fledged or the nest has failed, as determined by a qualified biologist, the nest will be removed and normal activities may resume.</p>	<p>Less than significant</p>

Effect on Bats

Several species of bats are found in the area and are considered Species of Special Concern by the California Department of Fish and Wildlife. These include: Pallid bat, Townsend’s big-eared bat, Western mastiff bat, and Western red bat. Of these, the Pallid bat is the most likely, but the others could also be present. Suitable habitat for these species is within the proposed quarry area in the form of oak trees and rock outcroppings. The Quarry project, through construction and/or ongoing quarry operations, could adversely impact bats which may roost within exposed rock wall crevices or pockets. Surveys and avoidance measures can reduce the potential impacts to these species to a level below significance.

Description of Impact	Mitigation Measure	Residual impact
<p>IMPACT BIO-5: Effect on Bats. The quarry project, through construction and/or ongoing quarry operations, may</p>	<p>MM BIO-5: Effect on Bats. <u>Prior to issuance of a notice to proceed with each phase of the quarry, the quarry operator shall retain a</u></p>	<p>Less than significant</p>

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Description of Impact	Mitigation Measure	Residual impact
adversely impact the Pallid bat and its roost, or one of three other species all of which are California Species of Special Concern. Removal of trees or rocks with crevices or pockets where bats are roosting would be considered a significant impact on these species.	<u>qualified biologist to conduct a survey for bats that may be roosting in trees, rock crevices or other locations.</u> If bat roosts are identified within the quarry during active operations, a qualified biologist will work to displace the bats using passive techniques. If quarry operations are stopped for greater than 30 days, a qualified biologist will survey the quarry for bat roosts prior to restarting quarry operations. After three nights of relocation efforts or after the qualified biologist has determined that the area is clear of bats, quarry operations may resume.	

Effect on California Red Legged Frog

Based on the habitat review and survey results by LFR, and the lack of sightings by Tierra-Verde, it is unlikely that the project will directly impact CRLF habit through vegetation clearing, grading, and quarry activities. It is possible, however, that CRLF may move into the main drainage within the quarry site from nearby habitat along the Salinas River or Moreno Creek, particularly if rainfall is high. CRLF is listed as a federal threatened species, and is a Species of Special Concern with the California Department of Fish and Wildlife. Any loss of CRLF would be considered a significant impact. Due to the location of the drainage area where CRLF may be present and the time when this area would be impacted, surveys for the identified species would take place prior to initiation of Phase 2. Appropriate surveys, as required by the resource agency overseeing protection of this species, will be conducted at a later date due to the later phase in which this area will be impacted. This impact can be avoided, however, through appropriate pre-construction surveys and conservation measures.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-6: Effect on California Red Legged Frog (CRLF). The project, through grading into the main drainage in Phase 2 of the quarry could impact creek or pond habitat used by CRLF – a species listed as threatened by the U.S. Fish and Wildlife Service and as a Species of Special Concern by the California Department of Fish and Wildlife. Any impacts to CRLF would be considered significant.	MM BIO-6: Effect on California Red Legged Frog (CRLF). Prior to authorization to proceed with Phase 2 of the quarry, or any preparatory work that would impact the main drainage located in the Phase 2 area, the quarry operator shall retain a qualified biologist to conduct a habitat assessment and/or protocol survey for CRLF in accordance with guidance published by the U.S. Fish and Wildlife Service current at the time. If CRLF is determined to be present, the quarry operator shall either modify the project design and implementation to avoid any take of the species, or obtain the appropriate permit or authorization from USFWS to allow any specified take of the species. Evidence of compliance with USFWS requirements shall be provided to the Department	Less than significant

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Description of Impact	Mitigation Measure	Residual impact
	of Planning and Building prior to the issuance of a Notice to Proceed for Phase 2A of the quarry, or related clearing and grading work.	

Effect on Oak Trees

There are 50 oak trees within the boundaries of the proposed quarry with diameters in excess of 5 inches. Of these, approximately six oak trees near the entrance area would be preserved through project design and alignment of the proposed access road. The loss of the remaining 44 oak trees within the quarry site is considered a potentially significant impact. An additional number of oak trees will be preserved within the open space design of the project (see MM BIO-1). This proposed open space area will include Central Coast Live Oak Woodland, Foothill Woodland, and Central Coast Live Oak Riparian Forest (described more in Impact BIO-9 below). A precise count of the number of trees that would be preserved within this area has not been done, but from a review of aerial photographs it is estimated that this area contains approximately 200 mature oak trees. The impact created by the loss of 44 oak trees within the proposed quarry will be mitigated by preservation of this relatively large number of additional trees within permanent open space. Such preservation of oak woodlands through the use of conservation easements is one of several acceptable oak woodlands mitigation alternatives measures identified by CEQA (PRC 21083.4(b) (1)). Other acceptable alternatives include planting and maintaining new oak trees, monetary contributions to the Oak Woodlands Conservation Fund, or other measures that may be developed by the County. For the proposed quarry project, however, the open space preservation which includes an area of undisturbed oak woodland is considered the most appropriate option. The CEQA Guidelines definition of “Mitigation” includes “Compensating for the impact by replacing or providing substitute resources or environments” (Section 15370(e)).

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-7: Effect on Oak Trees. The Quarry project will have a potentially significant impact by the direct removal of 44 mature (i.e., greater than five inches in diameter at breast height) oak trees.	MM BIO-7: Effect on Oak Trees. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-7, since the areas to be preserved in open space include approximately 200 mature oak trees in their associated habitats.	Less than significant

Effect of Dust on Plants

Dust tends to limit the amount of light which the vegetation is able to absorb, and can reduce the vegetation’s ability to uptake air. Dust caused by clearing and grading for the quarry project could impact nearby vegetation (both natural and agricultural vegetation) and cause a

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significant impact. This is a common effect associated with all major construction type projects, and is minimized through the application of dust control procedures. Typical procedures include paving all access drives and long-term use areas and using water as necessary on exposed earth surfaces or stockpiles to prevent visible dust plumes from leaving the project site. Implementation of fugitive dust control measures identified in MM AQ-1b will reduce potential impacts to a less than significant level.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-8: Effect of Dust on Plants. The proposed quarry will generate dust which could impact the health and vigor of native vegetation.	MM BIO-8: Effect of Dust on Plants. Mitigation AQ-1b serves as adequate mitigation for Impact BIO-8.	Less than significant

Effect on Vegetation and Habitat

A total of 40.29 acres of vegetation and habitat is expected to be removed by the development of the proposed project. This area includes the outer perimeter of the quarry and the access road from SR 58 and its graded slopes. This estimate of disturbance does not include improvement to the well on the Oster property and installation of water lines and a water tank to serve the project, since these will be mostly within existing ranch roads and disturbed areas. The final acreage tabulation may vary slightly as final grading and mining plans are prepared for the project. The majority of the quarry project site and area to be disturbed consists of Chaparral vegetation. The majority of the area to be preserved as open space is also Chaparral, but the proposed open space does include a higher proportion of oak woodland and other vegetation types considered sensitive by the California Department of Fish and Wildlife. For this reason, even if there are minor variations in the final acreage tabulations for the project, the conclusion of this discussion is not expected to be affected. Of the 40.29 acres to be disturbed, 2.35 acres contains sensitive habitat. The area to be preserved as open space within the property consists of almost 69 acres, and includes 9.66 acres of sensitive habitat (which represents a 4 to 1 conservation to impact ration for sensitive habitat areas). Table 4.5-6 shows expected impacts to the various habitat types, along with the areas of similar habitat that would be preserved in open space as part of the project. The loss of natural vegetation is considered a potential significant impact, but it would be mitigated through preservation of a larger area containing a larger proportion of vegetation that includes sensitive habitat. The CEQA Guidelines definition of “Mitigation” includes “Compensating for the impact by replacing or providing substitute resources or environments” (Section 15370(e)). Therefore, impacts to vegetation including sensitive habitats, is a less than significant impact.

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**TABLE 4.5-6
PROJECT-RELATED IMPACTS TO HABITATS,
AND OPEN SPACE AREAS**

Habitat Types	Impact Area (Acres)	Open Space Area (Acres)
Sensitive Habitats		
Coast Live Oak Woodland	1.55	7.75
Foothill Woodland	0.0	0.63
Central Coast Live Oak Riparian Forest	0.55	0.83
Seasonally Flooded Vernal Swale	0.25	0.45
Subtotal Sensitive Habitats	2.35	9.66
Non-sensitive Habitats		
Chaparral	35.44	54.32
Diablan Sage Scrub	0.32	0.75
Diablan Sage Scrub (Disturbed Condition)	0.68	0.95
Annual Grassland	0.45	1.09
Roads and Cleared Vegetation	1.05	2.01
Other disturbed (paved road, residences)	0.04	0.00
Subtotal Non-sensitive Habitats	37.94	59.16
Total all Habitats	40.29	68.82

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-9: Effects on Vegetation and Habitat. The quarry project will result in a loss of <u>2.35</u> acres of sensitive habitat, within a total disturbance area of 40.29 acres. This habitat loss is considered a potential significant impact.	MM BIO-9: Effects on Vegetation and Habitat. Mitigation BIO-1 serves as adequate mitigation for Impact BIO-9. The area preserved as open space in Mitigation BIO-1 would include 9.66 acres of sensitive habitats within a total of 68.82 acres of permanent open space.	Less than significant

Effect on Wetland or Riparian Habitat

The impact to Seasonally Flooded Vernal Swale would occur with the development of the main portion of the proposed project (after Phase 1B). During 2009 habitat assessments, approximately 0.25 acre of a seasonal drainage was identified within the quarry boundary, and an area of 0.45 acre associated with the same drainage was mapped in the area proposed for conservation. The project design also includes three drainage detention basins, the largest

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of which would occupy about 0.75 acre and would discharge into this same drainage course. The final configuration of the project after reclamation would retain this basin feature connected to the preserved drainage, and the other two detention basins. The drainage appears to carry water following storm events and for a short period of time thereafter, but a formal delineation of the drainage has not been conducted due to the length of time necessary for the overall project approval process. For purposes of this analysis, it is assumed that the 0.25 acre drainage bottom identified as a seasonally flooded area will be considered a streambed by the California Department of Fish and Wildlife.

The California Department of Fish and Wildlife will likely require Streambed Alteration Agreement associated with this grading and quarry activity in the drainage within the project. Since the project is designed to minimize loss of the drainage area and to preserve as much of its length as feasible, and can provide an additional larger area of wetland habitat in association with the detention basins, mitigation of the loss of the drainage habitat would be feasible. Therefore, the impact represented by the loss of 0.25 acre of potential streambed will be mitigated through preservation of habitat including 0.45 acre of similar streambed and its enhancement with additional wetland features in approximately 0.75 acre provided by the permanent detention basin. Depending on final design subject to approval by the California Department of Fish and Wildlife, the project is expected to provide a ratio of created:lost wetland habitat between 2:1 and 3:1.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-10: Effect on Wetland or Riparian Habitat. The Quarry project will adversely impact (remove) approximately 0.25 acre of Seasonally Flooded Vernal Swale, which may be wetland or riparian habitat.	MM BIO-10: Effect on Wetland or Riparian Habitat. The project design includes preservation of approximately 0.45 acre of the drainage in question, plus the creation of a 0.75 acre detention basin adjacent to the preserved portion of the drainage, and other detention basins within the quarry site. Prior to County issuance of a Notice to Proceed to commence quarry activities, the quarry operator shall provide a copy of an approved California Department of Fish and Game Streambed Alteration Agreement or a written determination that such an agreement is not necessary.	Less than significant

Effect on Wildlife Movement

On a local level, the Oster property provides continuous habitat along the Salinas River corridor for wildlife, and the quarry site within the property is part of the surrounding chaparral dominated hillsides. The primary drainage through the center of the quarry site functions as a localized movement corridor for wildlife species, as evidenced by small game trails observed along the drainage during the wildlife surveys. The dirt roads and fuel breaks

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are also used by mammals for movement, as evidenced by assorted scat observed during the 2009 LFR surveys.

On a regional landscape level, the development of the site would not impact movement of large mammals, migratory birds or other wildlife because large tracts of undeveloped land surround the proposed site on all sides. The rural residential uses bordering the Oster property to the southwest are very low density, and do not represent a major barrier to wildlife movement on a regional scale. The existing Hanson Quarry, located approximately a half-mile away on the west side of the Salinas River, has likely already habituated wildlife to mining activity or encouraged wildlife to move around the project vicinity. Therefore, locating these mining operations in proximity to one another and generally close to developed areas in the greater vicinity should reduce the regional landscape level impacts associated with mining activity. Development of a surface mine on the property has the potential to affect wildlife movement, but due to a combination of the project location (including the Salinas River corridor) and extent of open space proposed, along with the low potential for major development over the agricultural lands to the north and west, the potential effect is considered a less than significant impact.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-11: Effect on Wildlife Movement. The Quarry project may potentially impact landscape level movement of large mammals, migratory birds or other wildlife.	MM BIO-11: Effect on Wildlife Movement. Since this effect is less than significant, no mitigation is required.	Less than significant

Cumulative Effects

The project is about one-half mile distance from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 (Extractive Resource Area) Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

The loss of 40.29 acres of habitat from this region does not, by itself, constitute a cumulatively considerable biological impact, due to the quantity of surrounding habitat in the region surrounding the Project Site. The Project Applicant proposes the permanent preservation of 68.82 acres of undeveloped land on-site, as mitigation for the loss of Native Habitats. The on-going operations of Hanson Quarry within one-half mile of the proposed project do not require an increase in the amount of habitat being preserved within the Oster Quarry site.

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Additionally, implementation of a phased reclamation plan upon completion of the quarry operations would restore and replace some of the habitat value and function that was lost during construction and operations of the facility. When the site ceases to be used as an active quarry, the area should have moderate value as a natural area.

In summary, a combination of factors will avoid cumulative significant biological impacts in this region. These include: a) the proposed incorporation of permanent open space within the Oster/Las Pilitas Quarry to mitigate biological impacts, b) the fact that impacts associated with expansion of the Hanson Santa Margarita Quarry will be subject to review and the implementation of mitigation measures, c) the fact that future quarries that may be proposed within the EX1 Combining Designation area will be subject to similar reviews and mitigation requirements, and d) the fact that most of the surrounding lands are in rural land use categories and have relatively steep slopes that will serve to limit the intensity of future development that could impact biological resources. For these reasons, cumulative effects on biological resources of this project in conjunction with foreseeable development are not expected to be significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT BIO-12: Cumulative Effects Related to Biological Resources. The loss of 40.29 acres of habitat from this project site may potentially constitute a cumulatively considerable biological impact in this region, in the context of surrounding habitat in the region surrounding the project site.	MM BIO-12: Cumulative Effects Related to Biological Resources. Since this effect is less than significant, no mitigation is required.	Less than significant

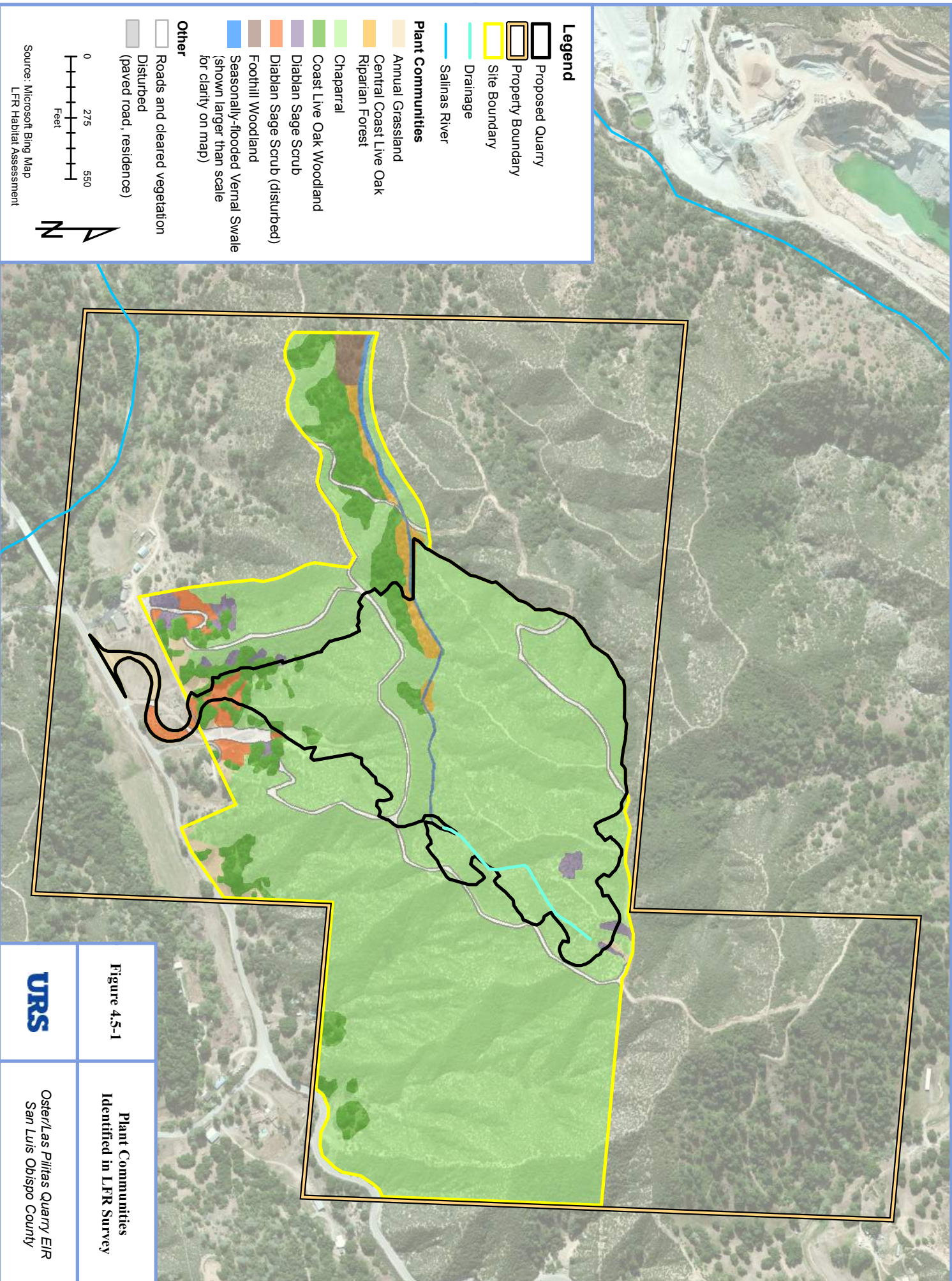
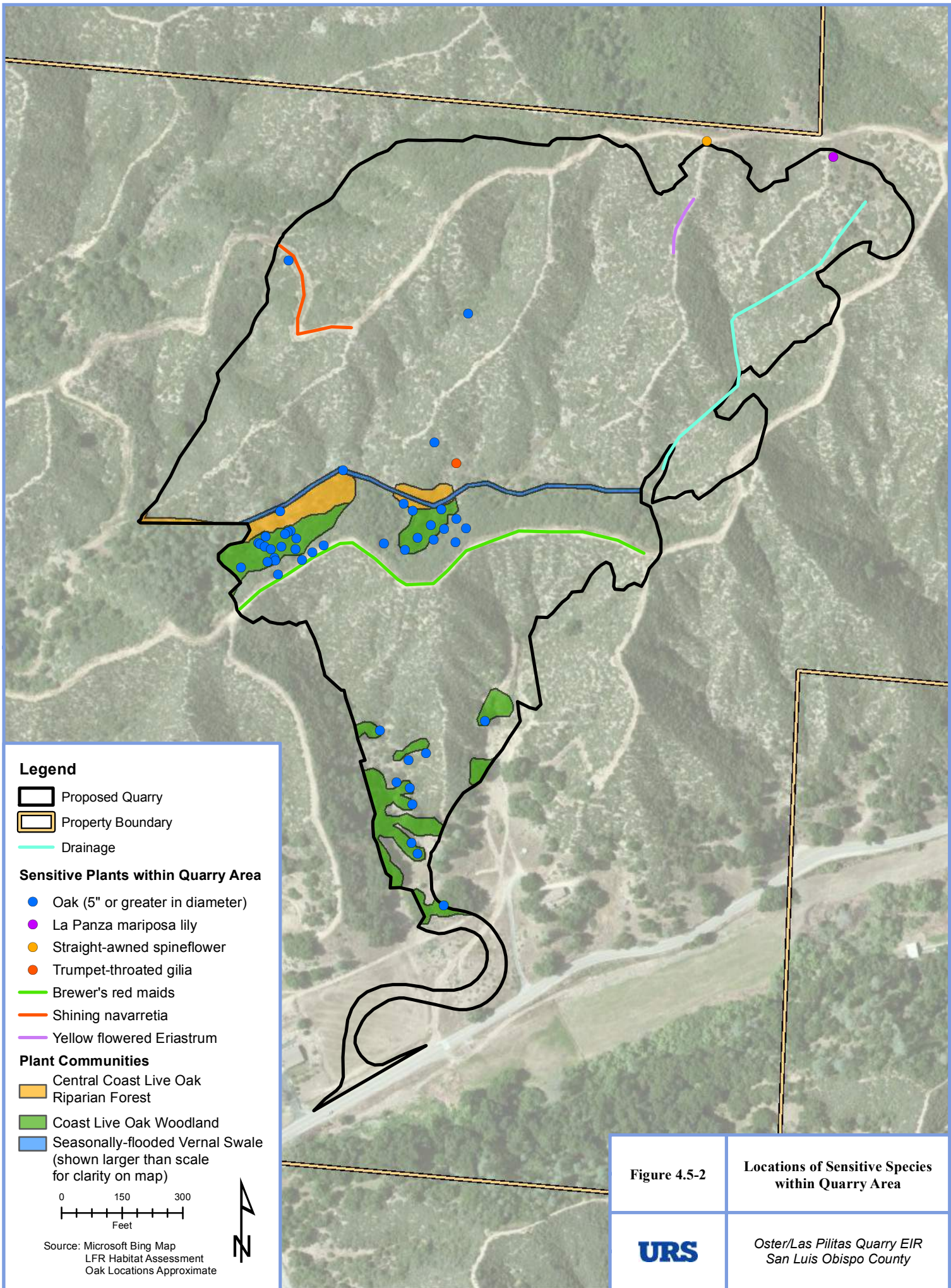


Figure 4.5-1

Plant Communities Identified in LFR Survey





Legend

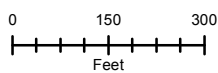
- Proposed Quarry
- Property Boundary
- Drainage

Sensitive Plants within Quarry Area

- Oak (5" or greater in diameter)
- La Panza mariposa lily
- Straight-awned spineflower
- Trumpet-throated gilia
- Brewer's red maids
- Shining navarretia
- Yellow flowered Eriastrum

Plant Communities

- Central Coast Live Oak Riparian Forest
- Coast Live Oak Woodland
- Seasonally-flooded Vernal Swale (shown larger than scale for clarity on map)



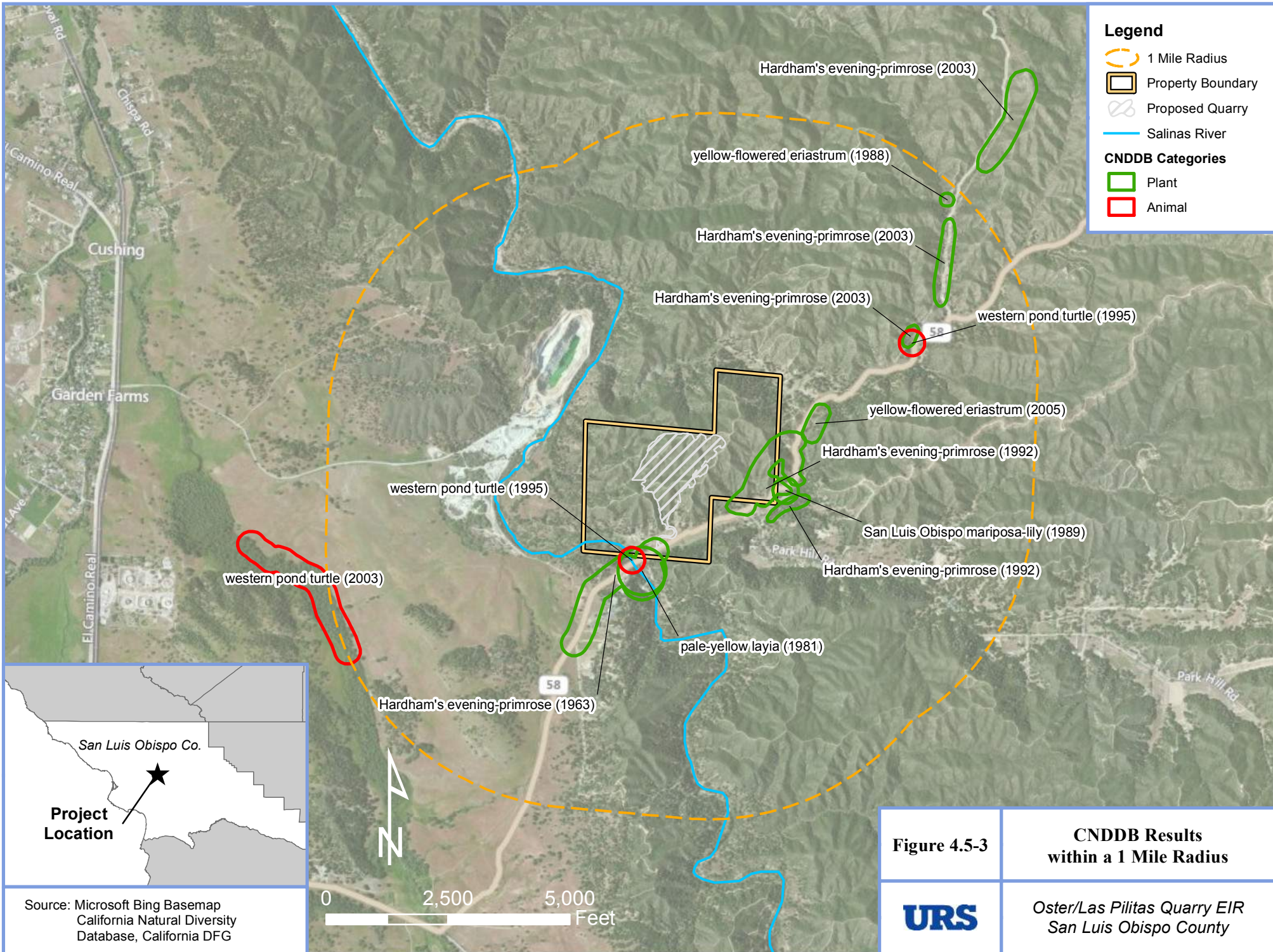
Source: Microsoft Bing Map
 LFR Habitat Assessment
 Oak Locations Approximate

Figure 4.5-2

Locations of Sensitive Species within Quarry Area



Oster/Las Pilitas Quarry EIR
 San Luis Obispo County



Legend

- 1 Mile Radius
- Property Boundary
- Proposed Quarry
- Salinas River

CNDDDB Categories

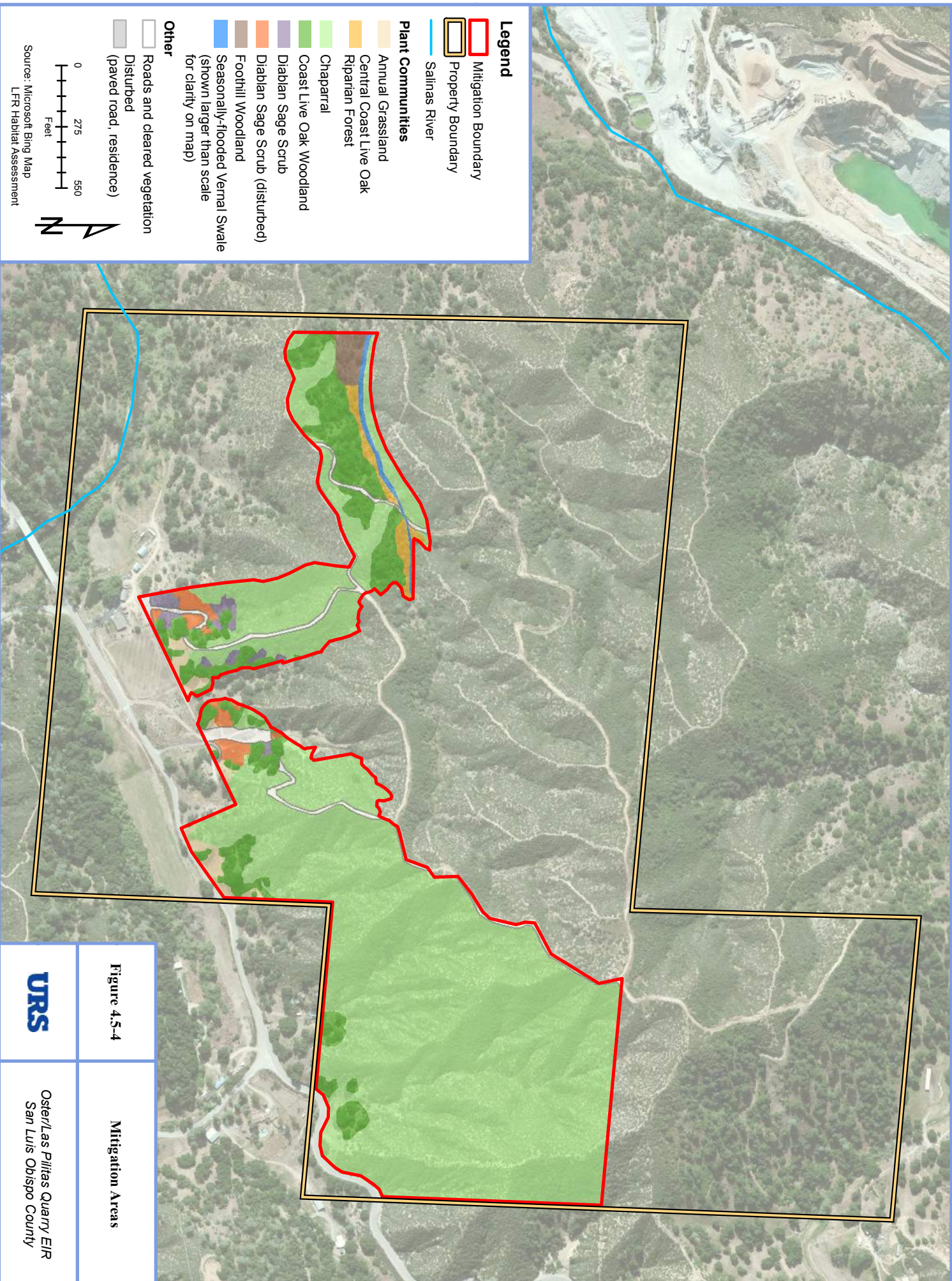
- Plant
- Animal

Figure 4.5-3	CNDDDB Results within a 1 Mile Radius
	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>

Project Location

San Luis Obispo Co.

Source: Microsoft Bing Basemap
California Natural Diversity Database, California DFG



Legend

- Mitigation Boundary
- Property Boundary
- Salinas River

Plant Communities

- Annual Grassland
- Central Coast Live Oak
- Riparian Forest
- Chaparral
- Coast Live Oak Woodland
- Diablan Sage Scrub
- Diablan Sage Scrub (disturbed)
- Foothill Woodland
- Seasonally-flooded Vernal Swale (shown larger than scale for clarity on map)

Other

- Roads and cleared vegetation
- Disturbed
- (paved road, residence)



Source: Microsoft Bing Map
LFR Habitat Assessment

Figure 4.5-4

Mitigation Areas



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

4.6 GEOLOGY

4.6.1 Existing Conditions

The Oster/Las Pilitas Quarry is located in central San Luis Obispo County, California in the vicinity of the San Luis Range of the Coast Range Geomorphic Province (Geosolutions 2009). The Coast Ranges are found between the Pacific Ocean on the west and the Central Valley to the east. The Coast Ranges extend to the northwest for approximately 600 miles to the Oregon Boarder and south for approximately 40 miles to the Santa Maria Valley area. The San Andreas Fault is a prominent geologic feature that is located approximately 26 miles to the northeast of the Site. The San Andreas is the primary structural boundary between the Pacific and North American tectonic plates.

Active faults are those that have shown movement within geologically recent time, the Holocene epoch, which includes the last 11,000 years. There are three active faults in San Luis Obispo County that are zoned under the State of California Alquist-Priolo Fault Hazards Act. The three faults are the San Andreas, the Hosgri-San Simeon, and the Los Osos faults (County of San Luis Obispo 1999). The closest of these three is the Los Osos fault zone about 12.5 miles southwest from the proposed quarry site (San Luis Obispo County: 1999: Map 2). There are at least 17 other faults in the County that are considered potentially active, meaning they have displaced geological formations of Pleistocene age (within the last two million years), but not Holocene (San Luis Obispo County 1999:52). The Rinconada fault, potentially active, is located about 1.5 miles to the southwest of the site and is the nearest mapped fault (San Luis Obispo County 1999: Map 2).

The site vicinity is underlain by Cretaceous-aged granitic rocks (Kgr) as mapped by Hart (1976) and Dibble (2004) (see Figure 4.6-1). Hart identified the Kgr as being Upper Cretaceous (99 to 65 million years before present) and Dibble identified the Kgr as being Cretaceous (144 to 65 million years before present). The Kgr is described as a coarse grained, light medium gray granodiorite and adamellite with pink and green clasts (Hart 1976). Where weathered, Dibble described the Kgr as having equal portions quartz and plagioclase. In some locations, the Kgr is overlain by Quaternary Alluvium.

The topography of the site is rather steep and undulating with a relief of 582 feet over a distance of 4,125 feet for an overall site gradient of 14 percent. The lowest point on the site is 950 feet, located in the southwest corner of the site along the Salinas River. The highest point is a peak called “Calf No. 2” (on the USGS Santa Margarita 7.5 minute quadrangle) with an elevation of 1,532 feet. “Calf No. 2” is located in the northeast part of the site.

The project site is not in an area typically subject to liquefaction of soils (San Luis Obispo County 1999: Map 3). It is in an area with a low to moderate potential for landslides, depending on slopes (San Luis Obispo County 1999: Map 4). Although the Salinas River crosses the southwest corner of the Oster property containing the proposed quarry, the quarry

itself would be located well outside of the 100-year floodplain of the river (San Luis Obispo County 1999: Map 5).

The property containing the proposed quarry site is drained by three surface water features including Calf Canyon Creek (far northeastern corner of the property), Moreno Creek (southern portion of property), and the Salinas River (southwestern portion of the property) (See Figures 2-1, 2-2, and 2-3). The main portion of the proposed quarry (Phases 2A through 3B) is within a small unnamed drainage that leads to the Salinas River about one-half mile west of the quarry site.

A Water Supply Assessment was completed in 2012 (See Appendix F). The majority of the groundwater resource is located in the southern part of the site in the Quaternary alluvium deposits located adjacent to the Salinas River. Surface and shallow subsurface flows in the Salinas River and in Moreno Creek provide water for the project site. The Kgr is not a good source of groundwater on the site or a major source in the region.

The California Department of Conservation has classified the La Panza granitics region containing the project site as Mineral Resource Zone 2 (MRZ-2), which means that the State Geologist has identified these areas as containing significant deposits of aggregate material (San Luis Obispo County Las Pilitas Area Plan 2003: page 6-1). Additional information regarding this classification and the importance of aggregate mineral resources is provided in Section 1.3.2 of this EIR.

4.6.2 San Luis Obispo County Plans and Policies

The County of San Luis Obispo General Plan recognizes a variety of geologic and seismic hazards. As outlined in the County's Safety Element, Goal S-5 (San Luis Obispo County 1999:17), the County's plans and policies are structured to minimize the potential for loss of life and property resulting from geologic and seismic hazards. Applicable policy statements from the Safety Element are summarized in Table 4.6-1 below.

Part of the County implementation of the state MRZ-2 classification is accomplished through the EX-1 Combining Designation in the Las Pilitas Area Plan, as explained in Section 1.3.2 of this EIR.

4.6.3 Regulatory Setting

There are no federal requirements specific to seismic or ground stability issues, but there are several widespread model documents that are used or incorporated by individual states in their building codes. These include the International Building Code and the Uniform Building Code. At the state level, the California Building Code (Title 24 California Code of Regulations) governs structural and other aspects of building and permitting. With respect to earthquake loads, the California Building Code requires design and construction to resist the

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**TABLE 4.6-1
SUMMARY OF COUNTY AND LOCAL GEOLOGIC
AND SEISMIC HAZARD MITIGATION POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
Goal S-5, Policy S-17, Fault Information	Address geologic and seismic hazards and requires a CEG review of reports, technical docs, and plans (Programs S-46 and S-47).	Applicant retained Geosolutions (2009) to prepare engineering geology investigation, which was reviewed by CA Dept. of Conservation, Office of Mine Reclamation (July 16, 2010). Issues to be resolved: 1) Document preparation by CA-licensed professionals, 2) revise slope stability analysis to confirm engineering properties, address structural discontinuities, and confirm stability of backfill on areas of final 0.5H: 1V slope.	Potentially Consistent – after resolution of Office of Mine Reclamation concerns. See Impact and Mitigation Measure GEO-1
Goal S-5, Policy S-18 Fault Rupture Hazards	Locate development away from active and potentially active faults; enforce Alquist-Priolo earthquake fault zoning act regulations.	Project is not in vicinity of active or potentially active faults. Nearest is 1.5 miles to southwest.	Consistent
Goal S-5, Policy S-19 Reduce Seismic Hazards	Enforce applicable building codes relating to the seismic design of structures to reduce the potential for loss of life and reduce the amount of property damage. (Programs S-50, 51, and 52)	Building permit and compliance with applicable building codes required for scale house and office building. Structural building design parameters recommended by Geosolutions (2009:12).	Consistent
Goal S-5, Policy S-20 Liquefaction and Seismic Settlement	Require evaluation of potential for liquefaction or seismic settlement to impact structures.	Only low potential for both, due to presence of near-surface granitic rocks (Geosolutions 2009:14-15). See previous response to Policy S-19.	Consistent
Goal S-5, Policy S-21 Slope Instability.	Avoid development in areas of known slope instability or high landslide risk when possible, and continue to encourage that development on sloping ground use design and construction techniques appropriate for those areas.	Slope stability was addressed by Geosolutions (2009), and addressed as described in Policy S-17 above. See previous responses to Policies S-19 and S-20.	Potentially Consistent – after resolution of Office of Mine Reclamation concerns. See Impact and Mitigation Measure GEO-1

effects of seismic motions in accordance with standards of the American Society of Civil Engineers. The San Luis Obispo County Building Code (Title 19 of the San Luis Obispo County Code) incorporates the California Building Code standards.

The definitions of active and potentially active faults, and their mapping by state and local government, are required by the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (PRC Sections 2621-2630). Updated mapping of seismic hazards from faults has been accomplished by the California Geological Survey, pursuant to the Seismic Hazards mapping Act of 1990 (PRC Section 2690-2699). Site specific geotechnical investigations are required prior to permitting most projects within defined seismic hazard zones. The proposed quarry is not in one of these zones.

4.6.4 Assessment Methodology

The detailed evaluation of geological and related risks for this project was performed by Geosolutions (2009). The assessment in this EIR is based on a review of that report, the review letter prepared by the California Department of Conservation, Office of Mine Reclamation (July 2010), and applicable County policies and procedures.

4.6.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Geology within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards; and/or
- b. Be within a California Geological Survey “Alquist-Priolo” Earthquake Fault Zone”; and/or
- c. Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill; and/or
- d. Change rates of soil absorption, or amount or direction of surface runoff; and/or
- e. Include structures located on expansive soils; and/or
- f. Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur; and/or
- g. Involve activities within the 100-year flood zone; and/or
- h. Be inconsistent with the goals and policies of the County’s Safety Element relating to Geologic and Seismic Hazards; and/or
- i. Preclude the future extraction of valuable mineral resources.

4.6.6 Project Impacts and Mitigation Measures

Potential Slope Instability

This effect considers criterion “a” in the above list, and could occur if there is an adverse relationship between a quarry slope and pattern of fractures or other discontinuities in the underlying granitic rock. If this occurs, the quarry slopes may be less stable than anticipated resulting in slope failure either during the quarry operation or after reclamation has occurred. This potential impact can be avoided through an analysis to identify and characterize fracture patterns or other discontinuities present, and then through a minor re-design to adjust the direction, gradient, and/or bench pattern of quarry slopes. The review letter submitted by the California Department of Conservation, Office of Mine Reclamation (July 2010:2-3) identifies this issue, and notes that additional analysis and demonstration of slope stability will be necessary to be consistent with state standards. State law in the Surface Mine and Reclamation Act requires that the Reclamation Plan and any amendments and associated analysis be provided to the Office of Mine Reclamation prior to the County approval of the Reclamation Plan (1 PRC 2774(c), (d)). This is a potentially significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT GEO-1: Potential Slope Instability. The project may create unstable slopes if fracture patterns or other discontinuities in the underlying granitic rock are of a type and orientation that would adversely affect the designed slopes.</p>	<p>MM GEO-1: Potential Slope Instability. The applicant/quarry operator shall supplement the Engineering Geology Investigation prepared by Geosolutions (2009) to address potential fractures or other discontinuities and their effect on final slope stability. If warranted by the supplemental investigation, the applicant shall also submit a revised quarry design, Reclamation Plan and slope stability analysis consistent with requirements of the Surface Mine and Reclamation Act. Any changes shall be reflected in the final Mining Plan, prior to Notice to Proceed.</p>	<p>Less than significant</p>

Exposure to Geologically Hazardous Conditions

This issue considers criteria “b,” “e,” and “g” in the above list, all of which concern potential hazards that are associated with specific locations. These include active earthquake fault zones, soils with expansive or “shrink-swell” properties, and 100-year flood plains associated with major drainages. None of these hazardous conditions are associated with the project site, and compliance with applicable routine building code requirements will provide an appropriate level of safety related to these issues. This potential effect is, therefore, a less than significant impact.

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Description of Impact	Mitigation Measure	Residual Impact
IMPACT GEO-2: Exposure to Geologically Hazardous Conditions. The proposed quarry site may potentially be affected by an Alquist-Priolo fault zone, expansive soils, or a 100-year floodplain.	MM GEO-2: Exposure to Geologically Hazardous Conditions. Since this effect is less than significant, no mitigation is required.	Less than significant

Soil Erosion and Loss of Topsoil

This effect considers criterion “c” in the above list. The project will remove vegetation and topsoil from areas to be quarried, and during these initial construction operations within each phase of the quarry, there will be an increased potential for erosion of soil, and its discharge as sediment in stormwater runoff from the site. If it occurs, this loss of soil and sediment discharge to Moreno Creek and the Salinas River would be considered a significant impact. The measures incorporated in the proposed Reclamation Plan, and other requirements related to control of erosion and sediment discharge, will minimize the potential for this impact. The Reclamation Plan calls for the removal of vegetation and topsoil, referenced as “growth media,” and their temporary storage in areas where erosion can be controlled by covering or other measures. Any runoff from these areas, and from all areas of the quarry site, will be controlled by detention basins consistent with the requirements of Section 22.36.050 (B) (1) of the County Land Use Ordinance. As the quarry proceeds, the growth media removed from one area will be used to cover and provide a revegetation surface for reclamation of previously finished slopes in a phase program. This approach will help to minimize the time during which stockpiles of topsoil and vegetation are exposed to erosive forces. This is considered a potentially significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT GEO-3: Soil Erosion and Loss of Topsoil. The project will create graded slopes into natural hillsides and remove natural vegetation and topsoil, which may increase soil erosion and sediment transport.	MM GEO-3: Soil Erosion and Loss of Topsoil. Vegetation and topsoil removed from the areas to be quarried shall be managed as described in the Reclamation Plan, as approved by the County. (Additional measures to minimize erosion and protect surface water from sediment discharge are described in Mitigation Measures WQ-1a and 1b).	Less than significant

Changes in Surface Runoff and Drainage Patterns

This issue considers criteria “d” and “f” in the above list. The project will involve grading and construction that will affect runoff into Moreno Creek (quarry access road and most of Phases 1A and 1B of the quarry), and runoff into a small unnamed drainage that leads to the Salinas River one-half mile to the west (Phases 2A through 3B of the quarry). The overall

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drainage pattern from the property will be maintained, and the project design includes three detention basins to intercept and detain runoff from disturbed areas so that the peak flows to the downstream surface water bodies are not altered by the project. One detention basin would be at the entrance to the quarry site and would manage runoff from the access road and related disturbed areas. A second basin would be in the southern portion of the quarry, and would detain runoff from the rock processing and stockpile area and portions of the quarry draining southward. The third detention basin would be constructed in the western portion of the quarry and enlarged as the quarry proceeds to control runoff from the main portion of the project site towards the west. These basins, in conjunction with other required measures to protect surface water quality, will minimize the effects of changes in surface runoff and drainage patterns. The potential increase in runoff and erosion is a significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT GEO-4: Changes in Surface Runoff and Drainage Patterns. The project will grade and quarry an area of approximately 41 acres, draining towards Moreno Creek (entrance road and Phases 1A and 1B), and in the northern unnamed creek drainage towards the Salinas River. Substantial and adverse on- or off-site erosion effects may occur.</p>	<p>MM GEO-4: Changes in Surface Runoff and Drainage Patterns. The detention basins and other drainage control features depicted in the project plans (Sheets 12 and 13 in plans dated September 9, 2009, or equivalent sheets in final plans) shall be installed as early as practicable in their associated construction phases, and shall be maintained throughout the life of the quarry operation. (Additional measures to minimize erosion and protect surface water from sediment discharge are described in Mitigation Measures WQ-1a and WQ-1b).</p>	<p>Less than significant</p>

Policy Consistency and Effects on Future Mining

This issue considers criteria “h” and “i” in the above list. As discussed above in Section 4.6.2, the project is expected to be consistent with all applicable County policies related to geological resources and hazards, with the implementation of the identified mitigation measures and compliance with requirements at the state and County level placed on surface mines and quarries. The project design also includes the preservation of about 69 acres within an open space easement intended as mitigation for the biological impacts of the project (see Section 4.5 of this EIR). The easement would extend over the portions of the Oster property west and east of the proposed quarry site (see Figure 4.5-4 in Biological Resources section). This easement would preclude future mining on this portion of the Oster property, but it would not affect the potential for mining granitic rock on nearby properties. To the extent that the easement prevents future residential uses in this area, it may tend to reduce the potential for land use conflicts with future mining on adjacent properties. The effects of the project design as proposed on future mining or on other applicable policies related to geological resources and constraints are less than significant.

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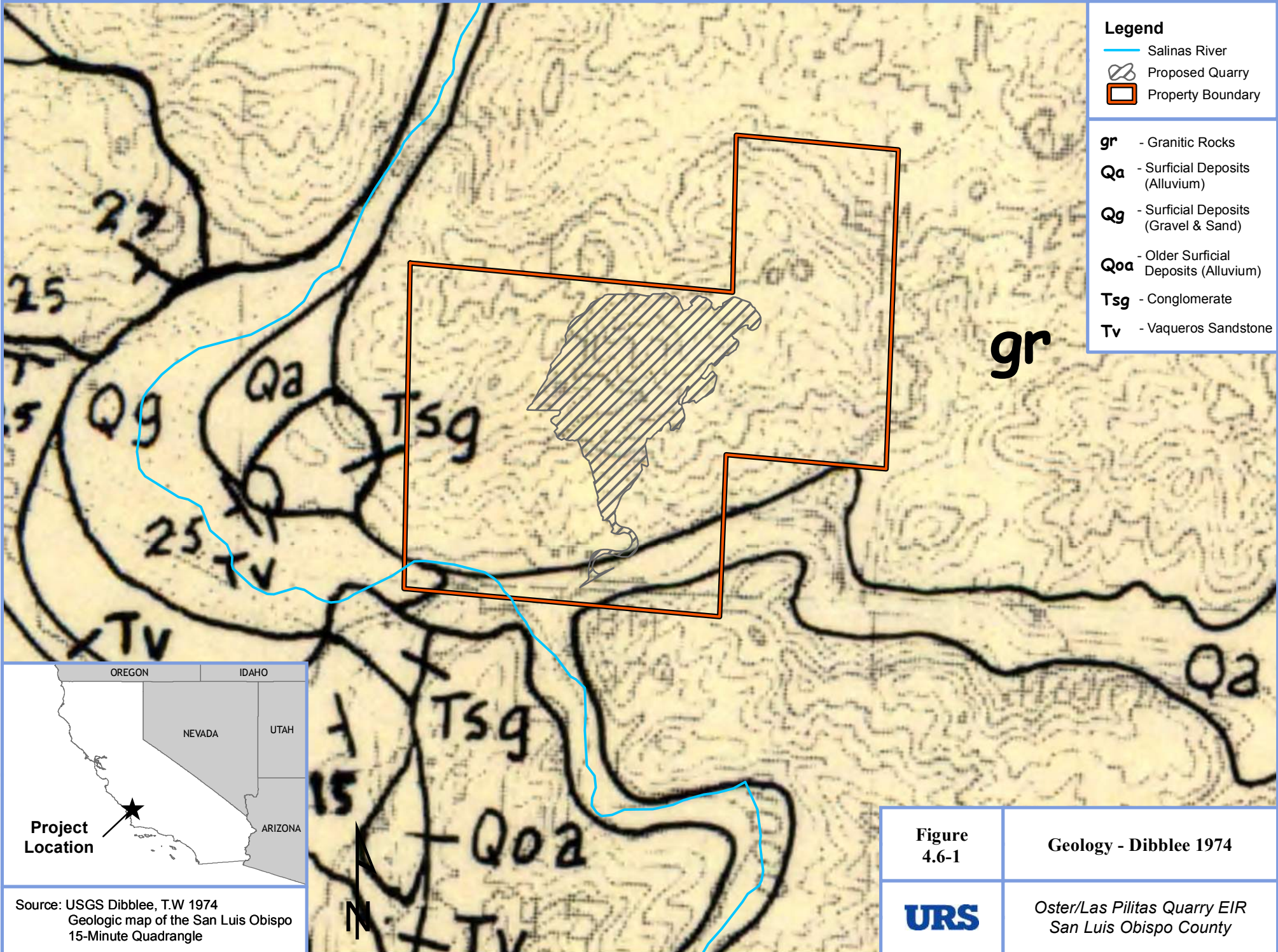
Description of Impact	Mitigation Measure	Residual Impact
IMPACT GEO-5: Policy Consistency and Effects on Future Mining. The project design may potentially preclude future mining on other portions of the Oster property, and/or potentially not affect the potential for mining granitic rock on nearby properties.	MM GEO-5: Policy Consistency and Effects on Future Mining. Since this effect is less than significant, no mitigation is required.	Less than significant

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

The project as designed, and with the listed mitigation measures applied to it, will not have any significant impacts related to geological constraints or resources. For the most part, each of the geological constraints involved in the significance criteria used in this analysis is evaluated on the basis of the specific location of a project relative to the constraint or issue being analyzed. Thus, there are no additive or cumulative effects associated with a project's distance from the nearest active fault zone, or presence or absence of soils subject to expansion. Some effects, however, could be cumulative in nature. These include the loss of topsoil through erosion and the discharge of sediment into surface water courses. These effects may be associated with any proposed quarry, or with any other type of development or even with a change in agricultural activities. For these issues, permit requirements and existing statewide programs provide measures that serve to avoid or minimize the potential effects on a project-by-project basis, therefore cumulative impacts are less than significant.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT GEO-6: Cumulative Effects related to Geology. Some effects related to geology could be cumulative in nature. These effects include the loss of topsoil through erosion and the discharge of sediment into surface water courses. These effects may be associated with any proposed quarry, or with any other type of development or even with a change in agricultural activities. For these issues, permit requirements and existing statewide programs provide measures that serve to avoid or minimize the potential cumulative effects on a project-by-project basis.	MM GEO-6: Cumulative Effects related to Geology. Since this effect is less than significant, no mitigation is required.	Less than Significant



Source: USGS Dibblee, T.W 1974
 Geologic map of the San Luis Obispo
 15-Minute Quadrangle

4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7.1 Existing Conditions

Regional Setting

The Oster/Las Pilitas Quarry is located in central San Luis Obispo County within the Las Pilitas Planning Area and is designated as Rural Lands (San Luis Obispo County 2010). The land in and around the property consists of steep hillsides supporting natural vegetation and flatter areas are found along drainages. Rural residences and ranches are located south of the central and southwestern portions of the property. The Coastal Branch of the California Aqueduct, which is a buried water pipeline, 54 inches in diameter, crosses the southern portion of the site. The Aqueduct delivers water from the California State Water Project to communities in San Luis Obispo and Santa Barbara Counties. The Santa Margarita Quarry of Hanson Aggregates is located to the west of the property.

Local Setting

The site vicinity is underlain by Cretaceous-aged granitic rock (Kgr) as mapped by Hart (1976) and Dibble (2004). In some locations, the Kgr is overlain by quaternary alluvium. Granitic rock does not normally contain naturally occurring asbestos (NOA). The issue of NOA is handled as a routine matter through review by the Air Pollution Control District, and is discussed in Section 4.3 of this EIR.

The quarry site is drained by three surface water features including the Calf Canyon Creek (far northeastern corner of the property), Moreno Creek (southern portion of the property) and the Salinas River (southwestern portion of the property). The quarry itself is not located in the 100-year floodplain of the Salinas River. The majority of the groundwater resource for the project is located in the southern part of the site in the quaternary alluvium deposits located adjacent to the Salinas River. Granitic rock (Kgr) is not a good source of groundwater.

Hazardous Materials Sites Database

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State and local agencies to comply with CEQA requirements. The List provides information about the location of hazardous material release sites. CalEPA is required to update the list at least annually. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the list, including State Response and/or Federal Superfund sites and Backlog Sites listed under the HSC section 25356.

Neither this Project site, nor any adjacent parcel, is listed on the Cortese List.

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Valley Fever

Valley Fever occurs throughout San Luis Obispo County, and the Public Health Department recorded 789 cases from 2000 through 2008. This potential health issue was raised in 2010, during the Scoping process conducted for the project. No occurrences were mapped at the project site or in the project vicinity. Two cases were mapped in the village area of Santa Margarita (San Luis Obispo County Public Health Department 2012).

Valley Fever is a disease contracted by exposure to spores that live within the top two to twelve inches of previously undisturbed soils. The project will excavate and stack topsoil from areas to be mined so that it can later be used for reclamation. The handling of the topsoil will occur infrequently as compared to rock that is normally handled and which should not contain Valley Fever spores. Valley Fever is primarily an occupational health issue and to a lesser extent a public policy concern related to dust generated from all types of construction projects that may increase the potential exposure of workers, as well as the general public, to this disease. Valley Fever is a lung disease common in the arid areas of the southwestern United States and northwestern Mexico. It is caused by a fungus (*Coccidioides immitis*) that grows in soils, forming spores that may become airborne when the soil is disturbed by winds, construction activity, farming or similar activities. In susceptible people, infection occurs when spores are inhaled. People working in occupations, such as construction or farming have an increased risk of exposure to the fungus and contracting the disease. The disease may cause flu-like symptoms (fatigue, cough, chest pain, fever, rash, headache, and body and joint ache), but in most people the symptoms are mild and may be unnoticed or mistaken for a common cold.

4.7.2 San Luis Obispo County Plans and Policies

Table 4.7-1 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan, relative to this proposed surface mining operation, that are applicable to hazardous materials.

4.7.3 Regulatory Setting

Federal and State requirements, applicable to hazards and hazardous materials, are presented below in Table 4.7-2.

4.7.4 Assessment Methodology

Potential impacts from hazards and hazardous materials were evaluated for the site and the project. The analysis of potential impacts considered both the construction and operation of the project.

The evaluation of potential hazards and hazardous materials impacts included the following:

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- Review of the Cortese List data base of known existing hazardous sites located at, adjacent to, or near the site.
- Review of the site location in regards to potential naturally occurring hazardous substances, such as Naturally Occurring Asbestos.

**TABLE 4.7-1
POLICY CONSISTENCY ANALYSIS –
HAZARDS AND HAZARDOUS MATERIALS**

Source	Policy Statement	Discussion	Preliminary Determination
Policy S-13, Safety Element	New development should be carefully located, with special attention given to fuel management in higher fire risk areas. Large, undeveloped areas should be preserved so they can be fuel-managed. New development in fire hazard areas should be configured to minimize the potential for added danger.	CALFIRE has been contacted and responded with their recommendations. The project will be compliant with these recommendations.	Potentially Consistent
Policy S-14, Safety Element	Ensure that adequate facilities, equipment and personnel are available to meet the demands of fire fighting in San Luis Obispo County based on the level of service set forth in the fire agency's master plan.	This policy relates to County administration and coordination with the California Department of Forestry and Fire Protection. The project design includes additional water storage capacity to improve firefighting facilities for the area.	Potentially Consistent
Policy S-15, Safety Element	The CDF/County Fire Department will maintain and improve its ability to respond and suppress fires throughout the County.	This policy does not apply to individual projects.	Not applicable to the project
Policy S-16, Safety Element	Improve structures and other values at risk to reduce the impact of fire. Regulations should be developed to improve the defensible area surrounding habitation.	The project does not include any new habitable structures. The scale house and office will be located well away from vegetation.	Potentially Consistent
Policy S-21, Safety Element	Avoid development in areas of known slope instability or high landslide risk when possible, and encourage design and construction techniques appropriate for those areas.	A preliminary slope stability report has been prepared. The proposed project will be consistent with California Department of Conservation standards and consistent with this policy.	Potentially Consistent
Policy S-26, Safety Element	Reduce the potential for exposure to humans and the environment by hazardous substances.	The asphalt recycling facility will not be accepting hazardous grade material. There would be no	Potentially Consistent

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foreseeable potential exposure to hazardous substances. Measures have been included to reduce potential impacts associated with Valley Fever.

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**TABLE 4.7-2
SUMMARY OF FEDERAL, STATE AND LOCAL REQUIREMENTS
HAZARDS AND HAZARDOUS MATERIALS**

Requirements	Administering Agency	Applicability
Federal		
Resource Conservation and Recovery Act (RCRA) – 40 CFR 261 et seq.	USEPA has authorized the California DTSC to administer the RCRA program in the State.	RCRA regulates hazardous waste from the time that the waste is generated through its management, storage, transport, and treatment until its final disposal. RCRA regulations address numerous aspects of hazardous waste management including determination of hazardous waste, containment requirements, inspections, training, spill response, contingency plans, treatment and disposal, recycling, reporting and additional other areas of hazardous waste management.
Oil Pollution Prevention – 40 CFR 112 et seq.	The County of San Luis Obispo Environmental Health Services, Hazardous Materials Program is the Certified Unified Program Agency for the project.	This regulation establishes procedures, methods, equipment and other requirements to prevent the discharge of oil and oil products from non-transportation related facilities into the waters of the United States. The regulation applies to facilities engaged in, among other activities, storing, processing, using or consuming oil and oil products. If specified storage thresholds are triggered, a Spill Prevention, Control and Countermeasure Plan must be prepared and implemented.
Occupational Safety and Health Act (OSHA) – 29 CFR 1910 et seq.	In the State of California, CalOSHA implements OSHA requirements.	Federal occupational safety and health regulations contain provisions for managing hazardous materials. OSHA promotes worker safety, worker training, and worker right-to-know. Hazardous Waste Operations and Emergency Response (HAZWOPER) training is required for workers who handle hazardous materials, as appropriate for their job description and responsibilities.
Emergency Planning and Community Right-to-Know Act (EPCRA) – 42 USC 1101 et seq.	The County of San Luis Obispo Environmental Health Services, Hazardous Materials Program is the Certified Unified Program Agency for the project.	EPCRA is also known as Title III of the Superfund Amendments and Reauthorization Act (SARA). This law helps communities protect public health, safety and the environment from chemical hazards. EPCRA provides the requirements for emergency release notification, chemical inventory reporting and toxic release inventories for facilities that handle chemicals over certain thresholds.
Mine Safety and Health Administration (MSHA) – Public Law 91-173	Mine Safety and Health Administration.	MSHA requires that the Mine Safety and Health Administration inspect each surface mine at least two times a year to determine compliance with health and safety standards and whether an imminent danger exists. MSHA also requires rigorous training and education programs for employers and employees in the

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**TABLE 4.7-2 (CONTINUED)
SUMMARY OF FEDERAL, STATE AND LOCAL REQUIREMENTS
HAZARDS AND HAZARDOUS MATERIALS**

Requirements	Administering Agency	Applicability
		mining industry.
Safe Explosives Act	Bureau of Alcohol, Tobacco and Firearms (ATF).	The Safe Explosives Act of March 2003 requires background checks for all persons that handle, use, or have access to explosive materials. The Act also requires all persons who use explosives to obtain a federal blasting license issued by the Bureau of Alcohol, Tobacco and Firearms (ATF).
Department of Transportation (DOT) – CFR Title 49	Department of Transportation.	DOT regulates the transportation of hazardous materials, including explosive materials. The regulations include requirements that companies transporting hazardous materials maintain a current DOT HAZMAT Certification Registration and maintain current enrollment in a drug screening program. DOT also has stringent standards for all vehicles that transport hazardous materials.
State		
Surface Mining and Reclamation Act (SMARA) – PRC Chapter 9, Sections 2710–2796	The County of San Luis Obispo acts as the Lead Agency under the State Office of Mine Reclamation (OMR) to implement and enforce SMARA regulations.	SMARA provides a comprehensive set of regulations for surface mining and reclamation to ensure that adverse environmental and safety impacts are minimized and that mined lands are reclaimed to a usable condition. SMARA requires the preparation, submittal and approval of a Reclamation Plan that demonstrates compliance with the regulations. Critical elements of the Reclamation Plan are the quarry design and slope stability. The Reclamation Plan is reviewed by the Office of Mine Reclamation (OMR) and approved by the County.
California Occupational Safety and Health (CalOSHA) Mine Safety Orders – CCR Title 8, Subchapter 17 Sections 6950–7283	CalOSHA.	The CalOSHA Mine Safety Orders regulate the safe operation of mining activities including: <ul style="list-style-type: none"> • Article 4: Accident Prevention Program • Article 6: General Safety Precautions • Article 11: Materials – Storage and Handling • Article 12: Ground Control • Article 15: Mining Equipment and Practices • Article 17: Loading, Hauling, and Dumping • Article 22: Fire Prevention and Control • Article 40: Inspections • Article 50: Explosives • Article 51: Storage of Explosives

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**TABLE 4.7-2 (CONTINUED)
SUMMARY OF FEDERAL, STATE AND LOCAL REQUIREMENTS
HAZARDS AND HAZARDOUS MATERIALS**

Requirements	Administering Agency	Applicability
		<ul style="list-style-type: none"> • Article 52: Transportation of Explosives • Article 53: Handling and Use of Explosives • Article 54: Mixing Blasting Agents • Article 55: Licensing of Blasters
CalOSHA General Industry Safety Order Explosives and Pyrotechnics – CCR Title 8, Subchapter 7, Sections 5236–5374	CalOSHA.	<p>The CalOSHA regulations regarding the safe management, handling, storage and transportation of explosive materials include:</p> <ul style="list-style-type: none"> • Article 113: Explosives and Pyrotechnics – Competency and Qualification of Blasters • Article 115: Transportation of Explosives • Article 116: Handling and Use of Explosives – Blasting Operations
Certified Unified Program Agency (CUPA) – California HSC Chapter 6.11 Sections 25404 et seq.; CCR Title 27 Sections 15100 et seq.	The County of San Luis Obispo Environmental Health Services, Hazardous Materials Program is the Certified Unified Program Agency for the project.	<p>The Unified Program allows certain State laws and regulation to be implemented by local governmental agencies that are certified by the California EPA. The Unified Program consolidates, coordinates, and makes consistent the requirements, permits, inspections and enforcement activities of the State’s environmental and emergency response programs summarized below. Hazardous Materials Release Response Plans and Inventories (Business Plans): The California Office of Emergency Services (OES) established the Business Plan Program (CCR Title 19, Sections 2620 et seq.) to prevent or minimize the damage to public health and safety and the environment from a release or threatened release of hazardous materials, and to satisfy community right-to-know laws. This is accomplished by requiring businesses that handle hazardous materials over threshold quantities to prepare a Hazardous Materials Business Plan that includes a hazardous materials inventory, site map, emergency plan, and a training program. The Business Plan must be submitted to the CUPA/emergency responders.</p> <ul style="list-style-type: none"> • California Accidental Release Prevention (CalARP) Program: The CalARP Program (CCR Title 19, Sections 2735 et seq.) was established to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and environment. The CalARP Program requires businesses that store or use certain hazardous materials over threshold quantities to

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**TABLE 4.7-2 (CONTINUED)
SUMMARY OF FEDERAL, STATE AND LOCAL REQUIREMENTS
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Requirements	Administering Agency	Applicability
		<p>prepare a risk management plan, an assessment of the off-site hazard potential and the implementation of a program to minimize the risk of a release.</p> <ul style="list-style-type: none"> • Aboveground Petroleum Storage Act (APSA) Program: The APSA Program (HSC Section 25404 et seq.) requires that the owner/operator of aboveground petroleum/oil storage tanks with cumulative capacities over 1,320 gallons prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan, conduct inspections, and implement the SPCC if necessary. • Hazardous Waste Generator, On-site Hazardous Waste Management and Treatment Permitting Programs: These programs regulate the generation, management, treatment and disposal of hazardous waste (CCR title 22; HSC Sections 25100 et seq.). DTSC implements these programs through the State's hazardous waste generator regulations, Tiered Permitting program and the Unified Program. These programs apply to facilities that generate, treat, store, accumulate, handle, recycle, reuse and/or dispose of hazardous waste. • California Fire Code: The Office of the State Fire Marshal is responsible for ensuring the implementation of the Hazardous Materials Management Plans and Hazardous Materials Inventory Statements Programs (CCR Title 27, Sections 15100 et seq.) The California Fire Code (CFC) also requires that a business that handles hazardous materials prepare a Business Plan.
CalRecycle 14 CCR 17381, 17381.1, 17381.2, 17383(b), 17383.7, 17386, 17414	CalRecycle – acting as the Local Enforcement Agency for San Luis Obispo County.	<p>The regulations in Section 17381 – 17383.7 define Type A inert processing operations, restrict the materials that may be accepted, and establish the “Notification Tier” for this type of operation.</p> <p>Section 17386 defines the “Operations Plan” that must be submitted to CalRecycle as part of the Notification.</p> <p>Section 17414 Sets forth record keeping requirements</p>
County/Regional		
San Luis Obispo County Code Section 22.10.050 – Explosive Storage	The County of San Luis Obispo.	The project does not include storage of explosive material on-site. In the event that such storage was proposed, then these requirements would apply. An amendment to this land use permit would be required if the operator wishes to store explosive material on-site,

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**TABLE 4.7-2 (CONTINUED)
SUMMARY OF FEDERAL, STATE AND LOCAL REQUIREMENTS
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Requirements	Administering Agency	Applicability
		in the future. In addition to this approval, a permit is required by the County Sheriff. A permit will only be approved where the Review Authority finds that the proposed site is within an area that is open in character and essentially free of development. Explosive storage shall not be located closer than 1,000 feet from any property line. Storage containment must be designed and constructed in compliance with the current edition of the California Fire Code adopted by the County and any applicable requirements of the County Sheriff.
San Luis Obispo County Code Section 22.36. – Surface Mining and Reclamation	The County of San Luis Obispo acts as the Lead Agency under the State Office of Mine Reclamation (OMR) to implement and enforce SMARA regulations.	This section provides regulations for surface mining and mineral extraction operations. It not only regulates the reclamation of the mined land but also regulates activities that could result in adverse environmental effects or impact health and safety. These standards are adopted as required by the SMARA.
San Luis Obispo County Code Section 22.50 – Fire Safety	CalFire enforces the State of California Fire Code.	This section provides standards for precautions to minimize hazards to life and property in the event of fire. In rural areas, a Fire Safety Plan must be submitted to the CalFire or designated appointee. It must include the location of water storage, storage of fuel, explosives, flammable or combustible liquids and gases, and identification of the extent of vegetative fuel reduction areas.
San Luis Obispo County Code Section 22.98 – Las Pilitas Planning Area	The CalFire enforces the State of California Fire Code.	This section provides standards for proposed projects that are specific to the Las Pilitas area and also includes requirements for a Fire Safety Plan.

- Evaluation of potential hazards and hazardous materials impacts associated with project activities and operations, including transportation, use and storage of hazardous materials, fire hazards and slope stability.
- Review of information from the County Public Health Department regarding occurrence and recommendations to control Valley Fever.

4.7.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Hazards and Hazardous Materials within

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San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Result in a risk of explosion or release of hazardous substances (e.g., oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances; and/or
- b. Interfere with an emergency response or evacuation plan; and/or
- c. Expose people to safety risk associated with airport flight pattern; and/or
- d. Increase fire hazard risk or expose people or structures to high fire hazards conditions; and/or
- e. Create any other health hazard or potential hazard.

4.7.6 Project Impacts and Mitigation Measures

Criterion “a,” related to the use of explosives and other hazardous materials in the project, is addressed by Impacts HAZ-1 and HAZ-2 below. Criteria “b,” “c,” and “d” are each addressed as separate potential impacts below. Criterion “e” dealing with other hazards is addressed in two separate issues: slopes and related quarry hazards, and the potential exposure to Valley Fever.

Risk of Explosion or Release of Explosive Material

Mining procedures include drilling and blasting to develop a series of slopes and benches. It is ~~anticipated~~ estimated that blasting would occur up to two times a week (but generally no more than 20 times per year) and only during daylight hours. According to the applicant’s Blast Plan (Gasch Associates 2009), blasting material will not be stored on-site but will be transported to the site by the contractor on an as needed basis. A blasting notification program will be implemented to notify the County and neighboring property owners before blasting events.

An inadvertent explosion of blasting material or accidental release of material during transportation could create a potentially significant risk to the public or environment. An accidental explosion of blasting materials on-site, or a blast when workers or others have not been sufficiently warned to clear the area, could injure or kill workers and/or create a significant impact to the environment. The Blast Plan (Appendix B) includes specifications for the use of explosives and blasting, limiting ground vibrations and air-overpressure levels, records requirements and safety and warning programs, and vibration predictions based on project parameters. OSHA includes detailed safety requirements for each blasting event to insure worker safety.

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The project could create a risk to the public or to the environment through the inadvertent explosion or release of explosive materials during transportation or use on the property. This is considered a potential significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT HAZ-1a: Risk of Explosion or Release of Explosive Material - Transportation. The Project could create a hazard to the public or the environment through inadvertent explosion during the transportation of explosives.</p>	<p>MM HAZ-1a: Risk of Explosion or Release of Explosive Material -Transportation. In accordance with the Blast Plan and as required by federal, state and local regulations, the Blaster and/or explosive delivery company must show evidence of compliance with the following requirements:</p> <ul style="list-style-type: none"> • Copy of drivers current CDL with HAZMAT endorsement, • Current USDOT HAZMAT Certification of Registration, • Maintain a current California HAZMAT Transportation License, • Current enrollment in a drug screening program according to USDOT CFR Title 49 regulations, and • Maintain a general liability insurance policy for explosive transportation for not less than \$5,000,000. 	<p>Less than significant</p>
<p>IMPACT HAZ-1b: Risk of Explosion or Release of Explosive Material – Use On-site. The Project would create a hazard to workers, public or the environment as a result of accidental explosions of blasting material at the site.</p>	<p>MM HAZ-1b: Risk of Explosion or Release of Explosive Material – Use On-site. The management, handling and storage of explosive materials shall be conducted in accordance with the Blast Plan (Gasch & Associates, December 2009) and with stringent adherence to the federal, state and local regulations. <u>To avoid potential damage to the State Water Project Pipeline, part of the California Aqueduct, the specific requirements of the California Department of Water Resources shall be incorporated into the Blast Plan. These requirements are specified in a letter from the Department, dated June 6, 2013 and submitted to the County of San Luis Obispo as a response to the Draft EIR for the Project.</u> The Blaster shall have a current, valid California "Blaster's License" issued by CalOSHA. No on-site storage of explosive materials is allowed.</p>	<p>Less than significant</p>

Release of Hazardous Materials or Wastes

The project does not include on-site fuel storage; vehicle and equipment refueling will be conducted by service trucks. Other small volumes of hazardous materials and wastes will be stored on-site in compliance with applicable regulations. These might include hydraulic fluid, lubricants, pesticides and similar common substances. Depending on the amounts of wastes generated and stored, the quarry operator or service contractor will be required to register as a hazardous waste generator, and may also be required to file a hazardous waste business

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plan and comply with other regulations such as those related to training requirements and emergency response planning. The detailed requirements are set by federal and state laws and regulations, and administered by the County Environmental Health Division of the Public Health Department, which serves as the Certified Unified Program Agency. Table 4.7-2 presents more detailed regulatory requirements.

All materials accepted for recycling must be “Type A” inert debris and will be required to be free of hazardous wastes and soluble pollutants at concentrations in excess of water quality objectives, and must meet other specifications. Type A inert debris may contain fully cured asphalt, which is defined in state regulations as “substantially hardened, and ...inelastic.” This material is not considered hazardous waste.

There could be accidental release of hazardous materials associated with fueling, washing, maintenance, leaks or spills of hazardous materials routinely used at mining operations (petroleum products, solvents, cleaning agents, grease, oils, welding gases and other hazardous substances). Asphalt and concrete debris from off-site construction projects will be brought to the Project site for recycling. Any hazardous substances contained within these debris loads could be released to the environment. This represents a potential significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT HAZ-2: Release of Hazardous Materials or Wastes. The Project could release hazardous materials or hazardous wastes stored on-site, or brought to the site in loads of material to be recycled.</p>	<p>MM HAZ-2: Release of Hazardous Materials or Wastes. Prior to issuance of a Notice to Proceed for the quarry project, the applicant/quarry operator shall provide the Planning and Building Department with documentation that the Environmental Health Division has reviewed and approved any required registration or plan documents related to the use of hazardous materials and/or generation of hazardous wastes. The management, handling, storage and disposal of hazardous materials and waste shall comply with the applicable federal, state and local hazardous materials and waste regulations. These may include the following requirements:</p> <ul style="list-style-type: none"> • Potentially hazardous materials and waste shall be stored in a manner to minimize a release (e.g., secondary containment). • A Training Program that addresses the federal, state and local regulatory requirements shall be prepared and implemented. • A Contingency and Spill Response Plan shall be prepared and implemented. <u>The response plan will include a requirement that spill kits be kept on-site at all times. The spill kits should be easily accessible and properly maintained to control and contain the amount and type of spill that potentially may occur based on an inventory of hazardous materials that will be stored on-site.</u> • A Business Plan which includes a hazardous materials/waste inventory, quantities and location of hazardous materials/waste 	<p>Less than significant</p>

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Description of Impact	Mitigation Measure	Residual Impact
	<p>and copies of the Training and Contingency Plans shall be prepared and provided to the Certified Unified Program Agency, if hazardous materials are stored above threshold quantities.</p> <ul style="list-style-type: none"> • Routine inspections of the equipment and storage areas shall be conducted. • Hazardous waste shall be transferred off-site by a licensed transporter to a permitted hazardous waste disposal facility. • Servicing and fueling activities shall take place only in designated fueling areas. • Sediment runoff shall be managed under the SWPPP. • Spills of fluid hazardous materials shall be reported immediately to the site supervisor and Environmental Health Division. • Inspection and emergency response records shall be maintained and made available to regulatory agencies upon request. • Any storage of materials needs to be consistent with Section 22.10.155 - Stormwater Management. 	

Effect on Emergency Response or Evacuation Plan

The Project is not expected to conflict with any emergency response or regional or local evacuation plans. The project will have its own dedicated access drive from SR 58, which will not affect access to either of the two residences located elsewhere on the property, or any other residences in the vicinity. Emergency response is provided by the CalFire/County Fire Station No. 40 on Parkhill Road, approximately 1.5 miles southeast from the project site. The access drive for the project is designed to meet CalFire requirements. In fact, on February 8, 2014, Laurie Donnelly, Battalion Chief/Fire Marshal for CalFire/San Luis Obispo County Fire Department, reported that: “From a strictly operational point of view, the proposed project does not present a significant concern relative to emergency vehicle response(s) upon Hwy 58 either east or west of the project site.” The effect on regional or local evacuation plans will be less than significant.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT HAZ-3: Effect on Regional or Local Evacuation Plans. The Project may potentially conflict with emergency response or regional or local evacuation plans. The project will have its own dedicated access drive from SR 58, which may potentially affect access to either of the two residences located elsewhere on the property, or any other residences in the vicinity.</p>	<p>MM HAZ-3: Effect on Regional or Local Evacuation Plans. Since this effect is less than significant, no mitigation is required.</p>	<p>Less than significant</p>

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Airport Flight Patterns

The site is not located in an area under an airport master plan, airport land use plan or within two miles of an airport landing strip. The nearest commercial airports are in: San Luis Obispo (13 miles) and Paso Robles (18 miles). The nearest private airstrip is Bogdan Airport, approximately 2 miles east of the Quarry site. The proposed quarry will not involve any tall structures or activities (i.e., blasting) that would interfere with aircraft operations in the vicinity. For these reasons, the proposed project would not expose people to a safety risk associated with airport flight patterns. This potential impact is less than significant.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT HAZ-4: Airport Flight Patterns. The proposed quarry may potentially involve activities that would interfere with aircraft operations in the vicinity. For these reasons, the proposed project could potentially expose people to a safety risk associated with airport flight patterns.	MM HAZ-4: Airport Flight Patterns. Since this effect is less than significant, no mitigation is required.	Less than significant

Fire Hazard Risk

The project will involve blasting and the use of heavy equipment in the vicinity of natural vegetation in an area with a very high fire hazard. These activities will increase the potential for man-made fires in the area, which would affect nearby residents and workers within the project site. This is considered a potential significant impact that can be mitigated through appropriate planning, access provision, and improved water availability.

CalFire reviewed the NOP and application materials for the project, and provided a preliminary review of requirements that would be applied to the project. These include compliance with applicable state fire laws, and include the following:

- Provision of a commercial access road with a minimum width of 20 feet, additional eight foot width for parking areas, all-weather surface, ability to support the weight of a fire engine, and vertical clearance of 13.5 feet
- Access gate meeting CalFire specifications for location clearance, access, emergency operation, and other requirements
- New water storage tank
- Site identification and address sign
- Portable fire extinguishers on all earth moving heavy equipment
- Spark arrestors on all equipment, and other clearance distances, smoking restrictions, and measures to minimize ignition sources

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The project design includes the provision of an additional secondary water storage tank for the purpose of dust suppression and can also be used to augment water availability for CalFire use at the project site. The project will require a grading and building permit for creation of the access drive and scale house, and will require approval of a fire safety plan from CalFire, at which time final conditions will be established. Fire hazard risk is a potentially significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT HAZ-5: Fire Hazard Risk. The project will involve blasting and the use of heavy equipment in the vicinity of natural vegetation in an area with a very high fire hazard severity zone.</p>	<p>MM HAZ-5: Fire Hazard Risk. Prior to issuance of Notice to Proceed or issuance of a construction permit for the project, whichever occurs first the applicant shall apply for and obtain CalFire approval of a Fire Safety Plan for the project. The applicant shall comply with provisions of the Fire Safety Plan and other requirements from CalFire. The applicant/quarry operator shall comply with the current California Fire Code (24 CCR Part 9), California Building Code, the Public Resources Code and any other applicable fire laws, as outlined in the "Commercial Fire Plan Review" letter from CAL FIRE/San Luis Obispo County Fire Department, dated July 9, 2010.</p>	<p>Less than significant</p>

Slopes and Other Quarry Hazards

Unstable, steep slopes may be created during the mining process. Workers will be exposed to risks from heavy equipment, blasting, steep slopes, truck operations, and other activities associated with mining operations.

The engineering design of the slopes and benches created during the mining process is regulated and monitored by state and local agencies. A Reclamation Plan, including a quarry design and slope stability analysis must be reviewed by OMR and approved by the County (Lead Agency under SMARA) prior to the start of mining activities. This issue is addressed in Section 4.6 as Impact GEO-1. The Lead Agency conducts annual inspections of the mine to ensure compliance with SMARA requirements.

CalOSHA regulates worker safety near the free face of the slopes and benches in order to minimize the potential that workers could be injured or killed by ground failures such as rock falls or landslides. CalOSHA also requires monitoring of noise levels at worker locations, and implementation of hearing conservation and protective measures if noise levels exceed specified limits. These limits are shown in Table 4.8-6 in the Noise section of this EIR.

The proposed quarry is located in the interior of the subject property, with buffer distances ranging from 450 feet to 750 feet from the nearest properties to the east and south, and distances over 1,000 feet in the other directions. The project will include a public notification system and formal warning system prior to any quarry blasts, which are described more fully in Section 4.9, Impact NOISE-3 in this EIR. These measures serve to minimize the potential

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exposure of members of the public to quarry hazards. These impacts are considered potentially significant impacts that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT HAZ-6: Slopes and Other Quarry Hazards. Unstable, steep slopes may be created during the mining process. Workers will be exposed to risks from heavy equipment, blasting, steep slopes, truck operations, and other activities associated with mining operations.	MM HAZ-6: Slopes and Other Quarry Hazards. Throughout the quarry lifetime, the operator shall comply with all applicable worker protection measures addressed by CalOSHA regulations. See mitigation measure GEO-1 (related to quarry slope and bench stability). See mitigation measure NOISE-3 (includes public notification and warnings for blast events).	Less than significant

Valley Fever

The project site (and all of San Luis Obispo County) is in an area that may contain the fungus that causes Valley Fever. Valley Fever is a disease contracted by exposure to spores that live within the top two to twelve inches of previously undisturbed soils. The project will excavate and stack topsoil from areas to be mined so that it can later be used for reclamation. The handling of the topsoil will occur infrequently as compared to rock that is normally handled and which should not contain Valley Fever spores. Valley Fever is primarily an occupational health issue and to a lesser extent a public policy concern related to dust generated from all types of construction projects that may increase the potential exposure of workers, as well as the general public, to this disease. If fungal spores are present, then clearing, grading, and stockpiling of topsoil material during construction or prior to starting a mine phase could release spores into the air and expose workers within the site to the disease. This is a potential impact, both to workers at the site and to travelers or nearby residents who may also be exposed to the disease. The County Public Health Department has developed a series of recommendations that can help minimize the potential for infection by the fungus and the potential for off-site transport of soil or material that may spread spores to other areas. Thus, the potential for exposure to Valley Fever is considered a significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT HAZ-7: Potential Exposure to Valley Fever. The project will grade, remove, and stockpile topsoil, which may expose workers to fungal spores that cause Valley Fever and contribute to the off-site transport of soil and spores.	MM HAZ-7a: Potential Exposure to Valley Fever/Dust Control. Mitigation measure AQ-1b (control of PM ₁₀ and fugitive dust) will provide adequate control of dust within the project site. MM HAZ-7b: Exposure to Valley Fever/Worker Safety. The Quarry operator shall incorporate applicable recommendations from the Public Health Department regarding recognition and control of Valley Fever in safety	Less than significant

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Description of Impact	Mitigation Measure	Residual Impact
	plans and worker training material. The content of this training material shall require approval by the Planning and Building Department prior to issuance of the grading permit for construction or the Notice to Proceed (whichever occurs first), and this information shall be maintained with operational and safety plans on-site.	

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to promote mineral extraction, it is reasonable to expect that future quarries will be approved and constructed in this area.

The project as designed and with the implementation of the identified mitigation measures will not have any significant impacts related to hazards and hazardous materials. There are several other granite quarries in the region which transport, manage and handle explosive and hazardous materials but each of these quarries are also subject to applicable regulatory requirements that mitigate their potential impacts. There are no additive or cumulative effects associated with the hazards or hazardous material at the site. Dust control measures and other recommendations to minimize the exposure of workers to Valley Fever are required at all major construction sites, quarries, and similar operations. These measures serve to minimize the potential for worker exposure to Valley Fever and the potential for any significant outbreaks or widespread infection from this disease.

In summary, the application of existing regulatory programs that address and control hazards and hazardous material that may be associated with the project, and with all similar projects, prevent these effects from having a significant additive or cumulative impact.

Description of Impact	Mitigation Measure	Residual impact
IMPACT HAZ-8: Cumulative Effects related to Hazards and Hazardous Materials. All present and future granite quarries which transport, manage and handle explosive and hazardous materials may cause potential impacts related to hazards. All quarries and major construction projects have potential to contribute to Valley Fever, through removal of vegetation and topsoil during grading.	MM HAZ-8: Cumulative Effects related to Hazards and Hazardous Materials. Since this effect is less than significant, no mitigation is required.	Less than significant

4.8 NOISE

A noise analysis was prepared by David Dubbink Associates (March, 2010) and submitted with the application material for this project, and is included as Appendix E of this EIR. The analysis and discussions in this section of the EIR are based in part on this analysis, and on an independent review and update of some results to reflect updated traffic projections performed by URS Corporation.

4.8.1 Existing Conditions

Units and Standards Used in Noise Assessment

Chapter 1 of the County Noise Element (San Luis Obispo County 1992) provides background information regarding the effects of noise and provides other general information on how noise is defined and measured. David Dubbink Associates (2010) also includes a discussion of noise fundamentals and a thorough review of noise measurement descriptors and standards. The following discussion presents a brief summary of this background information.

Noise levels are measured in a logarithmic scale (with units of decibels) in a way that duplicates the frequency sensitivity of the human hear (the “A” scale), with the abbreviation of dBA. Typically, noise levels in rural and suburban areas range from low values in the range of 35 to 45 dBA, up to 65 to 75 dBA that may be associated with locations near highways or arterial roadways. Normal human speech becomes inaudible when background noise levels are around 60 to 65 dBA. Noise levels in close proximity to machinery such as lawn mowers or heavy trucks or earth moving equipment, may reach 95 to 100 dBA.

Often noise levels vary over short periods of time and it is necessary to use a single dBA value to represent such changing noise levels. The single value, which may be measured or computed to represent the same amount of acoustic energy transmitted by a varying noise level, is called the Equivalent Noise Level (Leq) and must always be associated with the defined time period over which it applies. It is common to express Leq values for one-hour time periods, but shorter and longer periods might also be specified.

Many standards and guidelines for acceptable noise levels are based on 24-hour periods. For these types of standards the hourly Leq values are determined for different portions of the day, and then “penalty” dBA values are added to the noise levels during the evening and/or nighttime periods to account for the added nuisance of noise during these periods. Two common noise descriptors of this type are the Day-Night Average Noise Level (Ldn) and the Community Noise Equivalent Level (CNEL). The Ldn includes a 10 dBA addition during the nighttime hours (10:00 p.m. to 7:00 a.m.). The calculation of Ldn is done as follows:

$$Ldn = 10\log[(15/24)(10^{Ld/10}) + (9/24)(10^{(Ln+10)/10})]$$

Where:

Ldn = Day-Night Average Noise Level, dBA

Ld = Equivalent Noise Level during Daytime, 15 hours from 7:00 a.m. to 10:00 p.m.

Ln = Equivalent Noise Level during Nighttime, 9 hours from 10:00 p.m. to 7:00 a.m.

The CNEL is similar, but also includes a 5 dBA addition during the evening hours (7:00 p.m. to 10:00 p.m.).

Most noise levels are measured or computed to show their value at a standardized distance from the noise source – commonly 50 feet. Whenever a source noise level is measured or cited, the distance to the source should always be specified or clearly known. As the distance to the receiver location becomes greater, the noise level decreases in a logarithmic fashion. For a doubling of the distance from a point noise source, the dBA value of the noise will decrease by 6 dBA. For a perfect line source, the decrease amounts to only 3 dBA for each doubling of distance. Depending on their traffic volume and geometry, roadways are treated as either a line source or as something between a point and a line source, with the rate of decrease usually estimated as either 3.0 dBA (line source) or 3.5 to 4.5 dBA (between a line and a point source) for each doubling distance.

Existing Noise Levels – Project Vicinity

The project site is located in a rural area about three miles northeast of Santa Margarita, in the Las Pilitas Planning Area. The dominant noise source in the area is traffic along SR 58 and other roadways in the vicinity. Operations at the Hanson Aggregate Santa Margarita quarry, about one mile to the northwest of the proposed site, are also audible if local roadway noise does not overshadow them. Existing roadway noise levels were determined using the Federal Highway Administration Traffic Noise Model (TNM 2.5, Lau et al 2004), and traffic data from Caltrans (2012). In the project vicinity, SR 58 causes daytime hourly Leq values of about 61 dBA at a distance of 50 feet from its centerline. The nighttime hourly Leq along the highway at 50 feet is 55.4 dBA. Combining these two values using the definition of the Day-Night Average Noise Level (Ldn) presented above gives a result of 63.1 dBA at 50 feet from the center of SR 58. The Ldn values drop to 60 dBA at a distance of 80 feet from the roadway, assuming that there is no intervening topography or other features that would interfere with noise propagation.

Noise levels at various distances from the highway are summarized below in Table 4.8-1. In the project vicinity, these values are likely to be high estimates since they do not account for any losses in noise due to intervening ridgelines. The steep topography through which SR 58 passes in the project vicinity frequently blocks noise from some segments of the highway, so resulting noise levels at some residences are lower than the estimated values.

**TABLE 4.8-1
SR 58 NOISE LEVELS IN
PROJECT VICINITY**

Ldn (dBA)	Distance (Feet from Centerline of Highway)
63.1	50
60	80
55	173
50	373
45	803

There are several residences within one mile of the proposed quarry site and these were identified as appropriate receiver locations for estimates of the noise levels produced by the project. Residences in the project vicinity identified by Dubbink and Associates (2010) are shown in Figure 4.8-1. There are other residences in the general vicinity—two residences on the Oster property and others along the east side of SR 58 farther south of the project site and along Parkhill Road to the east. The residential locations chosen for the analysis, however, are the closest off-site residences most likely to be affected by noise from the project. Table 4.8-2 below identifies the residential locations, and lists the distance from each to nearby roads and to the closest point of the proposed quarry. None of the residences are located immediately adjacent to SR 58, and the estimated roadway noise levels (as Ldn) are all below 60 dBA. The estimated roadway noise levels in Table 4.8-1 (in Ldn) are also generally consistent with the roadway noise contours shown for this area by Dubbink and Associates (2010: Figure 9), which are in terms of the daytime Leq values. Dubbink Associates (2010:11) note that peak hour Leq values are generally equivalent to 24-hour Ldn values.

The Hanson Quarry is the only other major noise source in the vicinity of the project. Dubbink and Associates (2010:Figure 9) show that the operations at the Hanson Quarry cause noise levels to exceed 60 dBA within a distance of about 900 feet from the outer edge of the existing quarry. Noise from quarry operations is generally point source in nature, and drops off rapidly with distance. Residence number 1 (from Table 4.8-2) is the nearest to the Hanson Quarry, at a distance of about 2,500 feet from the closest point of regular operations. At this distance, the Hanson Quarry operations are expected to produce Leq values around 51 dBA. Specific operations may be higher or lower than this value, but the overall average represented by this Leq would be audible but not overly intrusive.

Existing Noise Levels – Santa Margarita Area

Residential locations along the length of SR 58 from the project site through Santa Margarita are also considered as noise-sensitive uses that might be affected by truck traffic noise associated with the project. There are about 18 residences located along Estrada Avenue and

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**TABLE 4.8-2
RESIDENCES IN THE PROJECT VICINITY**

Location (Fig. 4.8-1)	APN	Distance from Nearest Roadway	Estimated Existing Ldn	Distance from Nearest Edge of quarry
1	070-154-032	180 feet (SR 58 to the southeast)	54.7 dBA	1,600 feet (entrance area to the northeast)
2	070-154-009	150 feet (SR 58 to the northwest)	55.9 dBA	1,280 feet (entrance area to the northeast)
3	070-154-024	1,235 feet (SR 58 to the northwest)	42.2 dBA	1,820 feet (entrance area to the north)
4	070-142-017	690 feet (SR 58 to the northwest) 206 feet (Parkhill Road to the east)	46.0 dBA	1,690 feet (eastern edge of Phase 1A)
5	070-142-032	182 feet (SR 58 to the northwest) 130 feet (Parkhill Road to the southwest)	54.7 dBA	1,310 feet (eastern edge of Phase 3A)

the portion of J Street that is SR 58 near the eastern edge of the community. Santa Margarita Elementary School is also located in the vicinity of SR 58 and H Street, a noise sensitive use. Most of the downtown portion of Santa Margarita consists of commercial and industrial uses, but there are also about another 18 residences located along SR 58 from Estrada Avenue westward to US Highway 101. These residences along SR 58 are affected by highway traffic noise, and also by noise from railroad operations along the Union Pacific Railroad (UPRR) tracks. Figure 4.8-2 shows the locations of SR 58 through Santa Margarita and residential uses along the route, and the locations of four typical residences (R6 through R9) that are used to evaluate traffic noise impacts in Section 4.8.3 below.

The SR 58 segments along Estrada Avenue and J Street eastward carry an average daily traffic (ADT) volume of about 2,900 vehicles. The Ldn at 50 feet from the center of these roadways is 59.5 dBA. In most cases, the roadway width, shoulders, and typical yard setbacks provide sufficient distance so that houses along this route have Ldn values from existing roadway noise that are generally less than 60 dBA.

In the downtown or village area of Santa Margarita, there are several residences located along the north side of SR 58 – at the western end of the village (apartments, and single family residences) and at the eastern end (single family residences). The distances from the residences to the center of the highway generally vary from 60 to 80 feet, although a few are somewhat less. Given the 7,200 ADT along this segment of SR 58, and assuming the 35 MPH speed through most of the central village area, the existing roadway Ldn values at most of these residences would range from 60.5 dBA to 62.4 dBA. Near the eastern end, a few residences (represented by location R8 in Figure 4.8-2) are closer to the roadway, and the Ldn value here is 63.3 dBA. At the far western end of the downtown area, the posted speed limit is 45 mph. Older apartments on the north side of SR 58 at this location are located about

60 feet from the centerline of the road. With the higher traffic speeds here, the Ldn at the front of these residences is 65.1 dBA.

The noise contours shown for this area (downtown Santa Margarita) in the County Noise Element (San Luis Obispo County 1992: page A-15) indicate Ldn values that are higher than the above results – generally ranging above 65 dBA. This is because in the Noise Element, the UPRR tracks are a more dominant noise source than roadway traffic in this area. The estimates of railroad noise are based on the operation of 10 freight trains and 4 passenger trains per day (San Luis Obispo County 1992: page E-1). Current (2012) operations along this portion of the UPRR tracks amount to two Amtrak trains per day and an average of one to two freight operations per day. Even at the reduced level of operations under the current conditions, the railroad Ldn values at the residences on the north side of SR 58 in Santa Margarita are in the 60 to 65 dBA range. Overall, this railroad noise when presented as an Ldn value would be similar to, or only slightly greater than, the roadway noise from SR 58 through the community.

4.8.2 San Luis Obispo County Plans and Policies

County Noise Element and Ordinance Standards

Several policies in the General Plan Noise Element (San Luis Obispo County 1992) relate to noise standards used in the County. Those standards are presented here, before reviewing the related policies. There are two sets of noise criteria: 1) standards that apply to residential or other noise-sensitive uses that are exposed to general transportation noise (roadways, railroads, aircraft), and 2) standards that regulate the allowable noise generation from uses within a property that may affect nearby properties.

The first set of standards—related to noise from roadways affecting existing or proposed noise-sensitive uses—is found in the Noise Element, and is presented below in Table 4.8-3. For this EIR, the most applicable standard is the 60 dBA Ldn (or CNEL) exterior limit for residential areas. Based on the column heading in the table, the 60 dBA Ldn standard is intended to be applied in portions of the exterior that are used as outdoor living areas. For a screening procedure in this EIR, Ldn values are calculated for the shortest distance between the roadway centerline and the nearest point of the residence. As explained in footnote 3 of the table, where this limit cannot be met the land use may still be considered acceptable as long as the Ldn for interior living spaces does not exceed 45 dBA. Normal wood frame construction in buildings will typically provide an exterior-to-interior noise reduction of 24-27 dBA (U.S EPA 1974:Table B-4). From a practical viewpoint, this means that the maximum exterior Ldn value considered acceptable for residential uses is about 65 dBA as noted in footnote 3, although somewhat higher exterior noise levels are also sometimes acceptable (see San Luis Obispo County 1992 Noise Element: Figure 3-1).

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**TABLE 4.8-3
SAN LUIS OBISPO COUNTY MAXIMUM ALLOWABLE NOISE EXPOSURE –
TRANSPORTATION NOISE SOURCES**

Land Use	Outdoor Activity Areas ¹	Indoor Spaces	
	Ldn/CNEL, dB	Ldn/CNEL, dB	Leq, dB ²
Residential (except temporary dwellings and residential accessory uses)	60 ³	45	--
Bed and Breakfast Facilities, Hotels and Motels	60 ³	45	--
Hospitals, Nursing and Personal Care	60 ³	45	--
Public Assembly and entertainment (except Meeting Halls)	--	--	35
Offices	60 ³	--	45
Churches, Meeting Halls	--	--	45
Schools – Preschool to Secondary, College and University, Specialized Education and training Libraries and Museums	--	--	45
Outdoor Sports and Recreation	70	--	--

Source: General Plan Noise Element (San Luis Obispo County 1992: Table 3-1).

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

² As determined for a typical worst-case hour during periods of use.

³ For other than residential uses, where an outdoor activity area is not proposed, the standard shall not apply. Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

The second set of standards relates to noise generated by uses within a property, and how they affect adjacent or nearby properties. These standards are also found in the Noise Element (San Luis Obispo County 1992: Table 3-2), and are presented here in Table 4.8-4.

**TABLE 4.8-4
SAN LUIS OBISPO COUNTY MAXIMUM ALLOWABLE
NOISE EXPOSURE – STATIONARY NOISE SOURCES¹**

Noise Standard	Daytime	Nighttime ²
	(7:00 a.m. to 10:00 p.m.)	(10:00 p.m. to 7:00 a.m.)
Hourly Leq, dB	50	45
Maximum level, dB	70	65
Maximum level, dB-Impulsive Noise	65	60

Source: General Plan Noise Element (San Luis Obispo County 1992: Table 3-2).

¹ As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

² Applies only where the receiving land use operates or is occupied during nighttime hours.

The stationary source noise standards above are incorporated into the County Land Use Ordinance, in Section 22.10.120 of the County Code. Remaining provisions of this portion of the County Code are summarized as follows:

22.10.120 Noise Standards

A. *Exceptions to noise standards. The standards of this Section are not applicable to noise from the following sources.*

3. *Safety signals, warning devices, and emergency pressure relief valves;*
4. *Noise sources associated with construction, provided such activities do not take place before 7 a.m. or after 9 p.m. on any day except Saturday or Sunday, or before 8 a.m. or after 5 p.m. on Saturday or Sunday;*

[Exceptions 5–9 apply to other uses.]

B. *Exterior noise level standards*

1. [Sets forth the standards in Table 4.8-4 above.]
2. *In the event the measured ambient noise level exceeds the applicable exterior noise level standard in Subsection B.1, the applicable standard shall be adjusted so as to equal the ambient noise level plus one dB.*

C. *Interior noise level standards* [Interior standards are applicable when both generator and receiver locations are residential; therefore, they do not apply to this project.]

22.10.170 – Vibration

A. *Vibration standards.* [This section sets vibration standards in terms of “detrimental earth-borne vibrations” perceptible at points of determination based on the receiving land use. Numerical standards are not specified. This section also applies to land use conducted in or within one-half mile of an urban or village reserve line. The nearest such urban reserve line is the easternmost extent of the Santa Margarita Community, which is over two miles to the southwest in a straight line from the quarry site; therefore, this section does not apply to the proposed quarry.]

B. *Exceptions to standards. The vibration standards of this Section do not apply to:*

1. *Vibrations from construction, the demolition of structures, surface mining activities or geological exploration between 7:00 a.m. and 9:00 p.m.*

The first standard discussed above (related to noise from transportation sources) will be used to evaluate the effects of the project-generated truck traffic on existing noise-sensitive uses. The second set of standards will be applied to noise from the quarry operations and how it may affect existing residences in the project vicinity.

The County qualitative vibration standard does not apply to the project, both because of its type (surface mine) and because of its location (greater than one-half mile from village reserve line). This section, however, does include an evaluation of potential vibration effects based on procedures and standards from other agencies.

Table 4.8-5 below summarizes applicable General Plan policies, and presents a preliminary determination regarding the consistency of the proposed quarry and CUP with these policies. The final determination of policy consistency must be made by the County Planning Commission or Board of Supervisors.

4.8.3 Regulatory Setting

Federal

The US Environmental Protection Agency has established maximum noise level standards for a variety of vehicles and equipment. These standards are found starting at 40 CFR Part 201. For on-highway medium and heavy duty trucks, the applicable standards are in Part 205, and require that all such vehicles manufactured after January 1, 1988, have a maximum noise level of no more than 80 dBA at 50 feet under specified conditions of acceleration and other measurement procedures.

The Federal Department of Transportation has standards and guidelines for federally funded transportation projects such as highways, rail transit, and airports. The regulations and procedures related to highways are found at 23 CCR Part 772, which applies to programs of the Federal Highway Administration (FHWA). FHWA also publishes the Transportation Noise Model, which was used in the estimates of traffic noise for this project. The noise abatement criteria for residential areas used in federal projects is based on the highest one-hour Leq, and is 67 dBA. Other standards and procedures are defined in the regulations to establish a uniform review system and approach to mitigating traffic noise impacts.

Federal regulations implementing the Occupational Safety and Health Act (OSHA) are found at 29 CFR 1910.95. These regulations are intended to protect workers from adverse health effects of occupational noise exposure. They provide numerical limits, in terms of allowable noise levels and time periods, and require monitoring and a hearing conservation program and other measures to address exposures to high noise levels. Relative to the proposed quarry project, these standards and procedures apply to workers such as heavy equipment operators at the quarry, or others who might be exposed regularly to high noise levels on-site. The basic OSHA noise exposure limits are summarized in Table 4.8-6 below. The regulations

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**TABLE 4.8-5
CONSISTENCY WITH NOISE POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
Noise Element Policy 3.3.1	The noise standards in this chapter represent the maximum acceptable noise levels. New development should minimize noise exposure and noise generation.	Provides general guidance for interpretation of standards.	Potentially consistent.
Noise Element Policy 3.3.2	New development of noise-sensitive land uses (see Section 1.5 – Definitions) shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB Ldn ...unless the project design includes effective mitigation measures...	Does not apply to this project.	Not applicable.
Noise Element Policy 3.3.3	Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 3-1 within the outdoor activity areas [or] interior spaces of existing noise sensitive land uses.	Project will contribute to transportation noise sources. EIR includes appropriate analysis.	Potentially consistent.
Noise Element Policy 3.3.4	New development of noise-sensitive land uses shall not be permitted where the noise level due to existing stationary noise sources will exceed the noise level standards of Table 3-2, unless effective noise mitigation measures have been incorporated into the design...	Does not apply to this project.	Not applicable.
Noise Element Policy 3.3.5 a)	Noise from agricultural operations...is not required to be mitigated.	Does not apply to this project.	Not applicable.
Noise Element Policy 3.3.5 b)	Noise levels shall be reduced to or below the noise level standards in Table 3-2 where the stationary noise source will expose an existing noise-sensitive land use ... to noise levels which exceed the standards in Table 3-2.	Analysis in EIR indicates potential impact.	Quarry noise – potentially consistent, after implementation of mitigation. Blasting noise may not be consistent.
Noise Element Policy 3.3.5 c)	Noise levels shall be reduced to or below the noise level standards in Table 3-2 where the stationary noise source will expose vacant land in the ... Rural Lands ... land use categories to noise levels which exceed the standards in Table 3-2.	If the vacant lands immediately surrounding the Proposed Project are not likely to be developed with noise sensitive land uses within the foreseeable future, the Director of Planning and Building may	Quarry operations – potentially consistent, after implementation of mitigation. Blasting noise

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**TABLE 4.8-5 (CONTINUED)
CONSISTENCY WITH NOISE POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
		waive this policy. See Policy 4.5 below.	may not be consistent.
Noise Element Policy 3.3.5 (d)	For new proposed resource extraction ... noise sources ... where such noise sources will expose <u>existing</u> noise-sensitive land uses ... to noise levels which exceed the standards in Table 3-2, <u>best available control technologies</u> shall be used to minimize noise levels. The noise levels shall in no case exceed the noise level standards in Table 3-2.	Analysis in EIR indicates potential impact, and identifies control technologies.	Quarry noise – potentially consistent, after implementation of mitigation. Blasting noise may not be consistent.
Noise Element Policy 3.3.6	San Luis Obispo County shall consider implementing mitigation measures where ... new development may result in cumulative increases of noise upon noise-sensitive land uses.	EIR analysis includes cumulative traffic effects.	Potentially consistent.
Noise Element Implementation Measure 4.1	New public and private development proposals shall be reviewed to determine conformance with the policies of this Noise Element.	The EIR and project review process accomplishes this measure.	Consistent.
Noise Element Implementation Measure 4.2	When mitigation must be applied...the following measures shall be considered and preference shall be given...to... a) site layout, including setbacks, open space separation and shielding of noise-sensitive uses. (b) acoustical treatment of buildings and c) structural measures.	Site layout – relying on adequate setback distances and retention of topographic features for acoustic shielding – are the most feasible mitigation measures, and are identified in this EIR.	Potentially consistent.
Noise Element Implementation Measure 4.3	Mitigation of railroad noise.	Not applicable to this project.	Not applicable.
Noise Element Implementation Measure 4.4	Acoustical analysis required at time of application; content requirements specified.	Acoustic study submitted with application and this EIR section complies with this measure.	Consistent.
Noise Element Implementation Measure 4.5	Where mitigation in accordance with the policies and standards of this Noise Element is not feasible, the review authority may adjust or waive such policies and standards the minimum amount necessary to enable reasonable use of the property, provided that noise levels are then mitigated to the maximum extent feasible. The decision of the	EIR analysis identifies mitigation measures to minimize effects at residential locations. Mitigation will be adequate for compliance with applicable Land Use Ordinance standards. Blasting noise and other noise may remain	Potentially consistent.

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**TABLE 4.8-5 (CONTINUED)
CONSISTENCY WITH NOISE POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
	review authority may be appealed to the Board of Supervisors.	significant.	
Noise Element Implementation Measures 4.6 through 4.12	Relate to departmental implementation of acoustic analysis procedures, compliance conditions, review and update of the Noise Element.	These measures are implemented by the Planning and Building Department, and do not apply to any specific project.	Not applicable.
Noise Element Implementation Measure 4.13	The Acoustical Design Manual shall be made available to the public so that noise reduction measures can be incorporated into private projects consistent with the goals and policies of this Noise Element.	Other than references to site layout and design, noise reduction measures described in the Acoustical Design Manual all apply to new residential development in noise impacted areas, and do not apply to this project.	Potentially consistent.
Noise Element Implementation Measure 4.14	Mitigation measures to be considered when existing noise levels or cumulative increases in noise levels from new development significantly impact existing noise-sensitive land uses.	EIR analysis identifies mitigation measures.	Potentially consistent.
Noise Element Implementation Measure 4.15	Encourage alternative means of transportation.	Surface mining requires the use of heavy offroad equipment, and the use of on highway heavy trucks for deliveries. Alternate transportation modes are not applicable to this industry.	Not applicable.

also define procedures to combine exposures that occur in two or more separate periods during the day. Implementation of a Hearing Conservation Program is required whenever exposures exceed a time weighted average of 85 dBA or more during an eight-hour period.

For all motor vehicles (trucks and heavy equipment) used at off-highway job sites, federal regulations require backup or reverse signal alarms that are audible above the surrounding noise level (29 CFR 1626.601).

There are no specific federal laws related to allowable community noise levels. Residential projects that rely on federal Housing and Urban Development (HUD) financing, however, must meet exterior noise guidelines that are similar to those in the County Noise Element.

**TABLE 4.8-6
OSHA PERMISSIBLE NOISE
EXPOSURE STANDARDS**

Duration per Day, Hours	Sound Level dBA
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110
¼ or less	115

HUD and other federal guidelines commonly use a 65 dBA CNEL as the maximum noise level compatible with residential uses.

California

The California Government Code (CA Gov Code 65302(f) (1)) requires the inclusion of a Noise Element within the General Plan, the contents of which are specified by the Governor's Office of Planning and Research as part of their General Plan Guidelines.

Caltrans prepares traffic noise analyses in a manner that implements the FHWA regulations at 23 CFR Part 772, described in the preceding subsection.

The California Department of Industrial Relations, division of Occupational Health and Safety (CalOSHA) implements the California occupational noise exposure requirements, which are essentially the same as those for the federal OSHA reviewed above. The applicable California regulations are found at 8 CCR 5095. In one respect, CalOSHA regulations are more stringent, or at least more specific, than federal regulations. For off-highway vehicles capable of hauling or carrying more than 2.5 cubic yards of material, automatic backup alarms must be provided that can be heard for at least 200 feet in all directions (8 CCR 1592(a)).

Local – San Luis Obispo County

The County General Plan Noise Element standards and County Code noise requirements are presented in detail above in Section 4.8.2 as an introduction to reviewing consistency with applicable policies in the County Noise Element. In summary, the evaluation criteria most applicable to the proposed quarry project and the truck traffic it would generate are:

- For roadway noise: maximum of 60 dBA Ldn at residential locations (outdoor living areas)
- For point source project noise: 50 dBA daytime hourly Leq, (may be increased to ambient Leq + 1 dBA, per Section 22.10.120 B. 2. of the County Code), with a 70 dBA maximum

The County standards contain many other details, so Section 4.8.2 should be reviewed for a more complete discussion of these regulations.

4.8.4 Assessment Methodology

Much of the analysis of noise levels from the project was prepared by Dubbink and Associates (2010). URS staff reviewed this material during the preparation of this EIR, and for some issues additional measurements, calculations, and modeling work was performed.

A combination of noise measurements and modeling with the FHWA Transportation Noise Model (TNM 2.5, Lau et al 2004) was used to estimate current and future roadway noise levels with and without the project related truck traffic. Cumulative traffic noise levels were calculated based on a projection to 2030 using Caltrans historic data on traffic volumes from 2000 through 2010 for SR 58.

Project generated noise levels from general quarry operations—including excavation with heavy equipment, internal transport and stockpiling of material—were estimated based on field measurements of similar operations at the Hanson Quarry and by using the Wyle Laboratories NMSim model to account for the effects of topography and other factors in noise propagation (by Dubbink Associates 2010). These results were checked based on literature values for heavy equipment and procedures from the FHWA Roadway Construction Noise Model (FHWA 2006). A separate model, BNoise2, was used along with methods developed by the US Bureau of Mines to estimate blasting noise. Dubbink and Associates (2010: Appendix C) contains more information regarding the specific methods used for the original noise analysis. Appendix E of this EIR includes that report and additional data and assumptions used during the peer review and other modeling work done by URS for this section of the EIR.

4.8.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Noise within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Expose people to noise levels that exceed the County Noise Element thresholds; and/or

- b. Generate increases in the ambient noise levels for adjoining areas; and/or
- c. Expose people to severe noise or vibration.

The first of these items relates best to traffic noise levels, which will be evaluated in terms of both project-specific and then cumulative effects. Criteria to define a significant impact will depend on the situation with the existing conditions. The fundamental roadway noise standard for residential use is 60 dBA Ldn, from the Noise Element Table 3-2 (which is shown in Table 4.8-3 above). If existing exterior noise levels already exceed this value, then higher levels may be allowed as long as the interior standard of 45 dBA Ldn can be met and there are appropriate exterior living areas that still meet the 60 dBA Ldn standard (see Policy 3.3.3 in the Noise Element).

The relative contribution of the project generated noise levels is also important. In most real world situations, people will not perceive an increase in noise levels any less than 3 dBA. For this reason, increases below 4 dBA are usually not considered substantial. Other noise characteristics may also be considered in evaluating the significance of a change in noise levels. Higher peaks for short periods of time may not alter average noise levels, but may also be intrusive. Noise that can be identified as from a specific source, such as heavy trucks, may also be perceived as more intrusive.

The second issue—increases in the ambient noise levels for adjoining areas—will be discussed based on the noise from onsite project operations and the resulting noise levels on nearby properties. Activities within the quarry will be subject to the County Noise Ordinance standards. The basic requirement is to not cause hourly Leq values to exceed 50 dBA, or cause maximum noise levels to exceed 70 dBA, at adjacent residential properties. The point of compliance for application of this standard is important. The County Code states that it is to be determined at the property line of the receiving land use (footnote 1 in Table 4.8-4 above). Noise Element Policy 3.3.5 c) also applies this standard to vacant land in the Rural Lands category which surrounds the project site. Where development has already occurred, it is reasonable to apply this standard at the locations of existing residences. When ambient noise levels already exceed the standard, then a project may not cause more than 1 dBA increase.

The third issue, related to severe noise levels and vibration, will be used to present the effects of blasting operations within the proposed quarry.

4.8.6 Project Impacts and Mitigation Measures

Truck Traffic Noise

The project will cause an increase in the Ldn due to roadway traffic in the project vicinity and in the Santa Margarita area amounting to approximately 2 dBA. This increase is

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computed based on an addition of an average of 25 heavy truck trips per hour during the daytime. Along most segments of SR 58, where existing noise levels are below CNEL 60 dBA, this increase will not cause existing noise levels to exceed this threshold. For the two areas (described below) where residences are closer to the road and where existing CNEL values are already over 60 dBA, the project traffic will add slightly to these noise levels.

Table 4.8-7 below summarizes existing roadway Ldn values, and the anticipated increases based on the addition of 25 truck trips per hour from the project during the daytime hours. The top portion of the table includes residential locations in the vicinity of the project, while the bottom portion of the table is representative of residential locations adjacent to SR 58 through Santa Margarita. In most cases, the nearest point of the residence will remain below an Ldn of 60 dBA. At locations R-6 and R-7, the residential neighborhood along the J Street and Estrada Avenue segment of SR 58, the Ldn value is expected to increase by almost 2 dBA. At R-6 along J Street the resulting Ldn value would be 59.6 dBA. In round numbers, this would raise the noise levels up to the applicable County standard. This increase, particularly since it would be associated with heavy truck traffic, may be perceived as significant. It will affect outdoor living areas exposed to traffic noise and the increase in heavy truck traffic may be perceived as objectionable. For this reason, the traffic noise increase at these locations is considered a significant impact.

**TABLE 4.8-7
ROADWAY LDN INCREASES DUE TO TRUCK TRAFFIC**

Residential Location	SR 58 Segment	Existing Ldn	Existing + Project Ldn	Screening Result <60 dBA	Exterior Living Area <60 dBA, and interior <45 dBA	Increase Caused by Project
Project Vicinity						
R1	East of W. Pozo Road	54.7	56.6	Yes	Yes, Yes	1.9
R2	East of W. Pozo Road	55.9	57.8	Yes	Yes, Yes	1.9
R3	East of W. Pozo Road	42.2	44.1	Yes	Yes, Yes	1.9
R4	East of W. Pozo Road	46.0	47.9	Yes	Yes, Yes	1.9
R5	East of W. Pozo Road	54.7	56.6	Yes	Yes, Yes	1.9
Santa Margarita Area						
R6	J Street, east of Estrada Ave.	57.7	59.6 ¹	Yes	Yes, Yes	1.9
R7	Estrada Avenue	55.5	57.4 ¹	Yes	Yes, Yes	1.9
R8	East end of Village	63.3	64.2	No	No, Yes	1.9
R9	West end of Village	65.1	65.8	No	No, Yes	0.7

¹ These traffic noise level increases are considered a significant impact as explained in the text.

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The impact can be reduced through enforcement of speed limits for heavy trucks, and prohibition of the use of compression brakes in these areas, but truck traffic and noise will still be audible. The applicant has proposed several “Applicant Proposed Measures,” which are described in Section 4.14 Land Use in this EIR. These APMs include speed limits, a Traffic Control Management Plan, communications procedures, and other measures to reduce the incompatibility of the proposed quarry and truck operations with the surrounding community. These measures will have little effect on noise levels through the residential areas, but may help to inform residents and truck drivers alike about the noise issue and measures to reduce noise levels. The roadway geometry makes a noise wall through this neighborhood impractical, and there is no alternate truck route for the SR 58 corridor. Consequently, the traffic noise increases due to heavy trucks associated with the project along J Street and Estrada Avenue are considered a significant and not mitigable impact.

At two of the locations (R-8 and R-9), existing Ldn values already exceed 60 dBA. R-8 is a residence near the eastern end of the Santa Margarita Village and R-9 is at the apartments on the western end of the village. Noise levels at R-8 are between 60 and 65 dBA Ldn, and the Ldn at R-9 is just over 65 dBA. Unlike the quieter neighborhood along J Street, the heavier traffic volume through this downtown portion of Santa Margarita makes the noise of individual vehicles less distinct. Assuming standard wood frame construction for these structures, the interior Ldn values at these locations should remain below 45 dBA with the addition of project generated truck traffic, consistent with County standards. Therefore, the traffic noise levels at these locations through downtown Santa Margarita (R-8 and R-9) are considered less than significant.

The Santa Margarita Elementary School is located on H Street just over 600 feet from Estrada Avenue. At this distance from the truck route, the existing Ldn is 47.4 dBA, and with the addition of the project truck traffic the Ldn would increase to 48.2 dBA. Neither of these results would be considered a significant impact.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT NOISE-1: Truck Traffic Noise. The project will generate additional truck traffic, which may potentially increase noise levels along SR 58 by up to 1.9 dBA, with distinct low frequency noise associated with heavy trucks. At some locations the resulting noise levels will reach the County criteria of 60 dBA, which would be a potential significant impact.</p>	<p>MM NOISE-1: Truck Traffic Noise. The applicant/quarry operator shall advise all truck drivers exiting the facility regarding the noise sensitive residential uses along the truck route through Santa Margarita, and shall prohibit the use of compression brakes except under emergency conditions. Documentation in the form of notification copies shall be provided to the Planning and Building Department prior to the notice to proceed for Phase 1A of the quarry.</p> <p>NOTE: If Applicant Proposed Measure APM LU-1 is adopted, then MM-NOISE-1 would be incorporated into the Traffic Control Management Plan.</p>	<p>Significant and not mitigable.</p>

Quarry Operations Noise

During early phases of the proposed quarry, including the initial construction and quarrying through the completion of Phases 1A and 1B, it is likely that hourly Leq values caused by the quarry operations at some nearby residences will exceed the County daytime Leq standard of 50 dBA (or ambient plus 1 dBA). The predicted exceedances range from 3 to 7 dBA, and can be minimized through appropriate noise reduction procedures, monitoring and management. Even if the County Code standards are met, specific noises associated with the project may be audible to nearby residents and may cause some disruption. This is considered a potential significant impact that can be reduced, but not completely mitigated.

The operations will include the use of heavy equipment, including bulldozers, front-end loaders, rock drilling rigs, and periodic use of a portable rock processing plant that will include a crusher, sorter, and conveyor belts. Loading of trucks from stockpiles in the processing area will include dumping of rock by front-end loaders into the hoppers or beds of trucks. (Periodic blasting will also cause noise, but that is addressed separately below.)

The procedures used by Dubbink Associates (2010: Figures 9 and 10 and page 21) to estimate equipment noise levels involved the following steps:

- Measuring similar noise events from operations at the Hanson Quarry
- Identifying the likely worst case exposure by reviewing the grading plans for each phase of the proposed quarry
- Assuming a worst case equipment scenario by placing two of the loudest pieces of equipment at the worst case location – high quarry benches in Phase 1B
- Using model procedures to account for distance and shielding to compute resulting Leq values at the residences in question

The two sound sources placed at the highest Phase 1B benches to simulate a worst-case noise generation were rock crushing equipment (with a source noise of 86 dBA at 50 feet). Rock crushing equipment is not going to be placed on a high bench in the quarry, and all of the drill or excavation equipment likely to be used in this location has a slightly lower source noise. A different procedure was used by URS in preparing this EIR to estimate quarry equipment operations noise based on the FHWA Roadway Construction Noise Model (FHWA 2006). Source noise for various pieces of heavy equipment, in terms of the maximum noise level (Lmax) at 50 feet, was combined with data on the typical duty cycle of such equipment when in use to estimate Leq values. These estimates were done separately for each item in the project's mobile equipment inventory (see 2.3.2 of this EIR), and the estimates were summed as if all the equipment were operating in a small area. This source was then placed at different locations and the resulting Leq values at the nearby residences were calculated based on distance attenuation (6 dBA per doubling of distance). A direct

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calculation of the reduction provided by topographic shielding was not performed, but the presence or absence of intervening topography was noted. Where a large ridgeline projects well into the line of sight between the source and receiver, a reduction of 10 dBA was assumed for this analysis. For other instances where the topographic barrier was smaller, a reduction of 5 dBA was used.

Equipment source noise values used in both of the procedures is summarized in Table 4.8-8.

**TABLE 4.8-8
QUARRY EQUIPMENT SOURCE NOISE**

Item	No.	Lmax at 50 feet (dBA)	% Use	Hourly Leq at 50 feet (dBA)	Dubbink (2010:Table 2) Leq at 50 feet (dBA)
Loader	2	80	40%	79.0	78
Bulldozer	1	85	40%	81.0	
Excavator	1	85	40%	81.0	77
Rock Drill	1	85	20%	78.0	
Crusher Plant					86 (Jaw Crusher)

The same five residential locations in the project vicinity (as listed in Table 4.8-2 above) were used for the compliance points in evaluating the quarry operations noise. Dubbink Associates placed two noise sources at the upper western and eastern benches of Phase 1B representative of rock extraction and crushing operations (Dubbink Associates 2010: Figure 4, and page 21). The results from the Dubbink and Associates (2010: Table 4) are summarized in Table 4.8-9A below. The URS analysis is summarized Table 4.8-9B, and includes some features that vary from the Dubbink Associates analysis, as described in the following paragraphs.

**TABLE 4.8-9A
NOISE FROM QUARRY OPERATIONS
FROM DUBBINK ASSOCIATES (2010:TABLE 4)**

Location	Existing Leq (dBA)	Leq Standard (dBA)	Phase 1B Leq (dBA)	Exceed Standard?
R1	54	55	58	Yes (by 3 dBA)
R2	50	50	57	Yes (by 7 dBA)
R3	40	50	43	No
R4	44	50	46	No
R5	51	52	53	Yes

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**TABLE 4.8-9B
NOISE FROM QUARRY OPERATIONS
(URS ANALYSIS)**

Location	Existing Daytime Leq (dBA)	Leq Standard (dBA)	Distance to Early Phase 1A	Early Phase 1A (dBA)	Exceed Standard?	Later Phase 1A (dBA)	Exceed Standard?
R1	52.3	53.3	1,900 ft.	55.0	Yes (1.7 dBA)	52.8	No
R2	53.5	54.5	1,500 ft.	57.4	Yes (2.9 dBA)	54.2	No
R3	39.8	50	2,000 ft.	50.0	No	47.0	No
R4	43.6	50	1,794 ft.	49.7	No	48.9	No
R5	52.3	53.3	1,740 ft.	49.9	No	49.7	No
Closest RL (south)	53.5	54.5	1,043 ft.	59.6	Yes (5.1 dBA)	56.3	Yes (1.8 dBA)
Closest RL (east)	53.0	54.0	910 ft.	50.8 ¹	No	55.7	Yes (1.7 dBA)

¹ Includes a 10 dBA reduction due to large intervening ridge.

During the initial construction of the access road and entrance to the quarry, heavy equipment noise will be audible at nearby residences, particularly residences R1 and R2. The County Code exempts construction noise during normal work hours (Section 22.10.120 A.4.), but construction noise levels of 55 and 57.4 dBA were estimated at R1 and R2. The initial construction of the quarry, however, will extend into Phase 1A as the flat area for the scale and scale house is created, and as the flat working area for processing, stockpiling, and loading is created north of the scale. This will be a longer term operation, extending up to five years or more. It is not reasonable to exempt this portion of the quarry from the noise standards as “construction.” To estimate noise from this area of quarrying, a point centered near the scale house was used (referenced as Early Phase 1A).

In reviewing grading plans for the quarry, URS also chose an upper bench in the central portion of Phase 1A to represent a worst case location for quarry operations equipment (as opposed to eastern and western upper benches in Phase 1B chosen by Dubbink Associates). The URS location was somewhat farther from the residences to the south, but had a more direct line of sight exposure to R2. The closest locations of vacant Rural Lands (RL) designation were also considered in the URS analysis, for the application of Noise Element Policy 3.3.5.c.

The Dubbink Associates results are presented in Table 4.8-9Aa, and the URS results are presented in Table 4.8-9B. Although the numerical results differ slightly, the conclusions in both approaches are the same: the project excavation and quarry activities may cause a

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violation of the County Code Stationary Noise Source Standard at some of the nearby residences.

The nearest RL designated land to the south will be affected by Leq values in excess of the Leq standard based on 1 dBA in excess of current noise levels (54.5 dBA), during both the early (scale house) and later (upper bench) portions of Phase 1A mining. This land is part of the larger 39 acre parcel (070-154-024) that contains residence R3, which is located about 1,200 feet south of the property line in a canyon area, shielded from the quarry site by topography. Given the topography, it is unlikely that this parcel will be developed further, even though two primary residences are allowed in the RL designation. As the quarry works towards the north in Phase 1A, the nearest RL land is located across the property line to the east. A small triangular parcel of 3.4 acres (APN 070-142-016) is at this location east of the Oster property, and would be subject to Leq values above the standard based on existing noise levels at this location (54.0 dBA). This parcel has a single house on it, about 470 feet farther east, which is well shielded from the quarry site by the intervening ridge.

In addition to the regular noise of equipment, backup safety alarms associated with trucks and heavy offroad vehicles may also be heard from the project. Heavy equipment backup alarms consist of a repetitive tonal beep or horn, which can be heard at a distance of at least 200 feet (for vehicles with a haulage capacity of 2.5 cubic yards or more, 8 CCR 1592(a)). It is common for such alarms to emit sounds that are 5-10 dBA above background noise in order to be audible. Since they only sound for a few seconds every few minutes, backup alarms do not contribute significantly towards the hourly Leq values. They may contribute to maximum noise levels, however. For the same configuration of equipment locations and residential receiver locations discussed for Table 4.8-9B, estimates of alarm noise (which would be Lmax values) range from 56.9 to 60.5 dBA. Even though alarm systems are exempt from regulation by Section 22.10.120 A.3, these noise levels would be in compliance with the daytime Lmax standard of 70 dBA.

In summary, operational noise impacts are expected from the project due to the use of heavy equipment that will likely cause hourly Leq values at the nearest residences to exceed applicable County standards – either 50 dBA or ambient plus 1 dBA. Expected Leq values would all be between 55 and 60 dBA, and depending on location these would be from 3 to 7 dBA in excess of the applicable standard.

Several measures can be undertaken to ensure that the stationary source noise standard of 50 dBA for an hourly Leq (or ambient Leq plus 1 dBA, which ranges from 53.3 to 54.5 dBA depending on location) is met by the quarry operations. All equipment should be fitted with original manufacturer's mufflers or other noise reducing equipment, and no heavy equipment operation should occur during the nighttime hours (10:00 p.m. to 7:00 a.m. in the County Code Section 22.10.120). If possible, operations should be conducted in a fashion that minimizes the simultaneous operation of multiple pieces of heavy equipment. This measure

can reduce total noise levels by about 1–2 dBA. If multiple heavy equipment vehicles must be operated simultaneously, then stockpile and truck loading areas should be positioned so that the piles or other topographic barriers serve to intercept and block noise from truck loaders to offsite locations. If necessary, temporary noise barriers may be placed at locations that will shield at least some equipment. Such shielding and temporary barriers can typically provide an additional 5 dBA of noise reduction and more may be possible.

Alternative technologies are available to reduce noise levels from backup alarm systems. These include the use of broadband or white noise systems, which produce a multi-frequency “ssshhh” sound that is highly directional – aimed to be heard at the rear of the equipment but not off to the sides. Other systems use alarms with variable loudness so that in more quiet ambient conditions the alarms need not be as loud as in high traffic areas or in intensive construction zones. These types may be manually adjustable or may automatically adjust their loudness based on ambient noise levels. Both broadband alarms and adjustable alarm systems can reduce offsite noise impacts, but California regulations still require that such alarms on heavy equipment be audible for 200 feet in all directions.

Monitoring of operation noise levels should be planned to include either direct monitoring at nearby residences or monitoring at locations that will allow simple computation of noise levels at nearby residences. Contact information for possible noise complaints, and a response protocol, should be established and incorporated into the operations plans for the project. Choices of equipment operation and other measures, along with noise monitoring, can reduce noise levels and mitigate this impact.

Incorporation of the above measures into the project will reduce noise impacts. Based on the results in Tables 4.8-9A and 4.8-9B, noise reductions from equipment operations will have to range up to 3-7 dBA on an Leq basis in order to comply with the County Code Section 22.10.120. In order to achieve this level of noise reduction, it is likely that the project will have to include noise barriers in the form of permanent berms and stockpile designs and/or artificial barriers that can be placed around equipment operation areas. Even if the project complies with the requirements of Section 22.10.120, however, it may still cause some disturbance or adverse noise effects at the nearest residences during construction, from the perception of backup alarms, or from other disruptions such as loud dumping noises. The only way to avoid operational noise effects completely would be to prohibit this project and restrict all quarry projects to areas that are located at even greater distances from residential areas, about 3,000 feet. Since the hourly Leq values will be exceeded at surrounding sensitive receptors due to typical quarry operations, noise impacts are considered significant and not mitigable.

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NOISE**

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT NOISE-2: Quarry Operations Noise. During early phases of the proposed quarry, including the initial construction and quarrying through the completion of Phases 1A and 1B, the hourly Leq values caused by the quarry operations at some nearby residences will exceed the County daytime Leq standard of 50 dBA (or ambient plus 1 dBA).</p>	<p>MM NOISE-2a: Quarry Operations Noise/Maintenance. The applicant shall maintain all manufacturers' mufflers or other noise reducing equipment on all quarry vehicles and equipment.</p> <p>MM NOISE-2b: Quarry Operations Noise/Noise Management Plan. Prior to issuance of any permits for the start of construction, the applicant shall prepare and submit a noise management plan to specify measures for the control and monitoring of noise levels, to be approved by the Planning and Building Department and implemented by the operator throughout at least the completion of Phase 1A and 1B. Elements of the Noise Management Plan shall include:</p> <ul style="list-style-type: none"> • Descriptions of measures that may be used to reduce noise levels, which may include: <ul style="list-style-type: none"> ▪ The use of low noise emitting equipment ▪ Scheduling of operations to minimize the number of heavy equipment vehicles in use at one time ▪ Design of stockpile and loading areas to minimize the need for trucks to back up ▪ Use of adjustable back up alarms or similar measures to minimize noise from this source ▪ The design and placement of stockpiles to act as noise barriers ▪ The use of temporary noise barriers • Descriptions of monitoring points and times appropriate to obtain data to demonstrate compliance with the County Code (Section 22.10.120). <p>MM NOISE-2c: Quarry Operations Noise/Noise Complaint Procedures. The applicant shall provide the County Planning and Building Department with, and post at a visible location on the property, the name and contact information for a representative who will be available to respond to noise complaints. Procedures for responding to and resolving noise complaints shall also be incorporated into the operating plans for the quarry.</p>	<p>Significant and not mitigable.</p>

Blasting Noise and Vibration Effects

Different estimates of maximum noise levels (Lmax) from blasting operations associated with the quarry project range from a low of 62 to 64 dBA, up to around 80 dBA. Values above 70 dBA would be inconsistent with the County standard for Lmax values from a stationary source noise, and would be considered a significant impact. It is possible to reduce blasting noise and to provide measures that minimize its adverse effects, but it may not be possible to reduce the noise to below the applicable standard. This impact is, therefore, considered potentially significant and unavoidable.

Dubbink Associates (2010:17) estimates project blasting noise based on predictive equations and preliminary descriptions of the charge loading anticipated in the blasting plan for the

project (Gasch Associates 2009). Estimates were prepared for the same five residences discussed in above issues, and identified in Table 4.8-2 above. The results of the Dubbink Associates are summarized below in Table 4.8-10.

**TABLE 4.8-10
NOISE FROM BLASTING OPERATIONS**

Location	Distance (feet)	Lmax (dBA)
R1	1,920	78.7
R2	1,688	80.1
R3	1,822	79.3
R4	1,861	79.1
R5	1,920	78.7

These results were reviewed by URS during the preparation of this EIR, the input assumptions were confirmed, and similar results were obtained with independent calculations. Dubbink Associates (2010:14–15) also monitored a single blast conducted at the Hanson Quarry, which resulted in a noise level somewhat higher than predicted. A review of the data from that event by URS also indicates that it was atypical, and confirms that the approach used by Dubbink Associates relying on predictive equations is reasonable.

An alternative method of estimating blast noise is based on standard data in the FHWA Roadway Construction Noise Model (FHWA 2006: Table 3). For this estimate, a typical Lmax value at 50 feet of 94 dBA is used. With similar distances to the residential units in question, the computed Lmax noise levels ranged from 61.9 dBA to 64.5 dBA.

Dubbink Associates (2010:26) suggests that blasting noise should be evaluated based on the County Lmax standard for impulsive noise (see Table 4.8-4 above). This Lmax value of 65 dBA is less than the normal 70 dBA Lmax standard applied to other noise sources. The difference is due to the additional intrusiveness or annoyance associated with impulsive noises. The suggestion to use this more stringent standard is based on the general perception of hard rock blasting as being explosive in nature, and was influenced by observation of the Hanson Quarry blast that was atypical in its very percussive nature. Observations of blasting in other quarries, however and a general understanding of rock blasting argue that the normal Lmax standard of 70 dBA is more appropriate. This is because a quarry blast is not a single explosive event – it is a time delayed series of many small blasts extending over a time period of about two seconds. The sound is more like a wave crashing on a beach rather than like a bomb explosion. Even with the normal Lmax standard of 70 dBA, however, the Dubbink Associates prediction of noise levels indicate that the blasting noise from the worst case quarry bench areas would not meet the standard. It is possible that the predictive model used is overly conservative, and that the FHWA empirical value and results may be more

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accurate, in which case the predicted Lmax values would comply with the standard. Since the result is uncertain based on these two methods, the EIR conclusion will adopt the more conservative and assume that the impact will be significant.

This discussion does not consider the warning sirens or horns that are required in all blasting operations. Even though these warning devices may be exempt from compliance with the Noise Ordinance (per Section 22.10.120 (A) (3) of the County Land Use Ordinance), they still contribute to the overall noise impact.

Blasting noise could be reduced by using a series of fewer, smaller, and/or shallower holes in each blast, and then conducting blasting on a more frequent schedule. This might reduce the noise impact from a single blast but might also be more intrusive in the long run with more frequent events. There are other standard procedures used by agencies to help minimize the effects of blasting, and these should be required of the proposed quarry project. These methods include:

- Conduct blasting only during daytime periods, when ambient noise levels are generally at their highest.
- Provide notification materials to the public and all residences within areas likely to perceive the blast, with descriptive information about the blast and its effects and information about the warning signals and all-clear signals used. This may involve a meeting, direct mail information, public notices, or combination of methods.
- Use signals as described to notify residents and all persons in the area that blasting is imminent.
- Monitor and record the vibration and air overpressure (sound) effects of each blast.
- Respond to any complaints received.

These measures should be implemented with each blast event and will help to reduce the adverse effect of blast noise as much as possible, but cannot avoid the impact entirely.

Ground vibration effects from blasting and operation of heavy equipment were also reviewed, but are not expected to pose a significant effect. Significant vibration from these types of operations is limited to within a few hundred feet of the source, and all of the nearby residences are over 1,000 feet from where quarry operations are proposed. Gasch Associates (2009:14) predicted peak particle velocity (PPV) values for typical locations out to a distance of 1,000 feet – necessary to evaluate and protect structures within the Oster property where the quarry is located. Using the same method (which is also described by Caltrans (2004:52-53), the PPV was calculated for each of the five nearby residences in the vicinity. The resulting PPV values ranged from about 0.2 to 0.3 inches/second. While perceptible, these levels are considered very low and are not expected to cause any damage to normal structures

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NOISE**

(Caltrans 2004:56-58), and are substantially lower than the typical standards cited in the blasting plan (Gasch Associates 2009:12). Therefore, ground vibration from the project operations and blasting is not expected to be a significant impact.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT NOISE-3a: Blasting Noise. Quarry operations involving blasting may potentially cause a significant impact. During early phases of the proposed quarry blasting, Lmax values at nearby residences are predicted to range from 62 dBA to 80 dBA, depending on the prediction method used.</p>	<p>MM NOISE-3a: Blasting Noise/Blasting and Public Notification Plan. Prior to the Notice to Proceed with quarrying in Phase 1A, the applicant shall provide, and the Planning and Building Department shall review and approve if acceptable, a Public Information and Notification Plan for blasting activities. The Plan shall describe the blasting and related activities, and specify a notification procedure so that nearby residences may be informed ahead of time regarding pending blast events. The warning and all clear signal system shall be described, and contact information provided for the purpose of obtaining further information or for lodging complaints. All blasting activities shall be conducted by a licensed blasting contractor in a manner consistent with the blasting plan prepared for the project, and shall be limited to daytime hours on normal working days. All blast events shall be monitored for air overpressure (sound levels) at points that will allow computation of resulting noise levels at nearby residences. Blast reports, including the results of ground vibration and air overpressure monitoring shall be retained at the quarry office and shall be submitted to the County Department of Planning and Building on request, and be available for inspection. Control measures and public information can reduce the effects of blasting noise but they cannot be fully mitigated.</p>	<p>Significant and not mitigable.</p>
<p>IMPACT NOISE-3b: Blasting Ground Vibration. The project will involve blasting and heavy equipment operation that may potentially induce vibration at nearby residences. Estimated peak particle velocities of 0.2–0.3 inches per second are considered very low and are not expected to cause damage to normal structures.</p>	<p>MM NOISE-3b: Blasting Ground Vibration. Since this effect is less than significant, no mitigation is required.</p>	<p>Less than significant.</p>

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9), meaning it is a known aggregate resource area. Since this Combining Designation

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is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

Although the Hanson Santa Margarita Quarry is in the same general vicinity as the proposed project, it is located at a sufficient distance such that its noise effects are just barely audible along SR 58 and in the vicinity of the project (Dubbink Associates 2010:13). The activities that occur at the Hanson quarry were considered as part of the baseline setting. Extension of the mining activities at the same production rates and using the same equipment would result in a continuation of the existing conditions. For this reason, the most important cumulative noise effects related to the project are those involving roadway traffic noise. The project is expected to have a lifetime of 25 years or more, and will continue to generate truck traffic on area roadways as the surrounding communities and traffic volumes grow.

For an assessment of cumulative traffic noise impacts, Dubbink Associates (2010:Table 5) used the 2030 estimates of future traffic from the original project traffic report, and showed that the resulting increases in the peak hour Leq values was generally 1dBA to 2 dBA. The peak hour Leq values (considered equivalent to 24-hour Ldn values) at distances of 50 and 100 feet were, 65 and 60 dBA, respectively, without the project. When the project traffic was added, the result was a 1 dBA increase to 66 dBA and 61 dBA.

An alternate approach was used to confirm this result, by projecting SR 58 volumes out to 2030 based on historical Caltrans data back to 2000. The older range of data was used because in recent years there has been a decrease in ADT volumes on SR 58. The resulting projection indicates that the expected increase in Ldn values is 1.2 to 2.0 dBA – which is consistent with the 1–2 dBA increase predicted by Dubbink Associates. In the vicinity of the proposed quarry, average daily traffic (ADT) volumes along SR 58 will grow but will remain below 3,000. Ldn values at the existing residential locations in the project vicinity will increase but will remain between 44 and 58 dBA. Increases due to the project generated heavy truck traffic will be about 2 dBA, so the resulting noise levels at all residential locations will remain within the applicable County standard of 60 dBA.

In Santa Margarita, however, the existing traffic conditions cause Ldn values at the east and west end of the village in excess of 60 dBA. These were shown as existing Ldn values for locations R8 and R9 in Table 4.8-7. Future traffic growth include potential build out and traffic associated with the Santa Margarita Ranch Agricultural Residential Cluster Subdivision, both with and without the proposed project, will cause Ldn values to increase and surpass 65 dBA as summarized in Table 4.8-11.

With these future noise levels, it will become increasingly difficult to provide exterior living areas with Ldn values below 60 dBA, and interior Ldn values may begin to exceed 45 dBA. This cumulative traffic noise impact is considered significant, and the project will contribute towards this impact.

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NOISE**

**TABLE 4.8-11
CUMULATIVE TRAFFIC NOISE LEVELS IN SANTA MARGARITA**

Residential Location	2030 Traffic Ldn (dBA)	2030 Traffic + Project Ldn (dBA)
R8 (east end of village)	64.6	65.5
R9 (west end of village)	66.5	67.2

Given the proximity of existing residential uses to SR 58 passing through Santa Margarita, it is not feasible to construct a wall or other noise barrier between the roadway and still maintain access to those lots with driveways along the roadway. Such a construction project would also be inconsistent with the design guidelines for the Santa Margarita village. Project generated truck noise can be reduced with a requirement that all trucks using the quarry be required to maintain mufflers (MM Noise-2a), but the noise standards will still be exceeded at various locations within the community of Santa Margarita. Even without the proposed Oster/Las Pilitas Quarry project, this cumulative traffic noise impact would still occur. For these reasons, the cumulative traffic noise impact at these locations within Santa Margarita is considered significant and not mitigable.

This conclusion is consistent with that in the Santa Margarita Ranch Final EIR (San Luis Obispo County 2008;pages 4.8-12 through 4.8-17). The actual noise results in that earlier EIR were somewhat higher for several reasons, however. These included higher traffic volumes from 2008 compared to the actual lower volumes in 2010, the calculation of noise levels based on CNEL rather than Ldn (which is slightly lower), and the inclusion of traffic estimates from the Santa Margarita Ranch future development area.

In summary, due to its separation from the existing Hanson Santa Margarita Quarry the proposed quarry is not expected to contribute to cumulative operational impacts. It will, however, contribute towards cumulative traffic noise impacts. Cumulative traffic noise will remain less than significant in the project vicinity, but will be significant and not mitigable at residential locations along SR 58 in Santa Margarita.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT NOISE-4: Cumulative Effects related to Operational Noise. Operational noise from the project, when added to existing operational noise from the Hanson Santa Margarita Quarry that may cause a significant impact.	MM NOISE-4: Cumulative Effects related to Noise. Since this effect is less than significant, no mitigation is required.	Less than significant
IMPACT NOISE-5: Cumulative Traffic Noise. Truck traffic from the project, when added to existing truck traffic from the Hanson Santa Margarita Quarry and traffic noise from other projects in the vicinity may cause a significant impact.	MM NOISE-5: Cumulative Traffic Noise. Mitigation Noise-1a and 1b serve as mitigation for Impact NOISE-5.	Significant and not mitigable.

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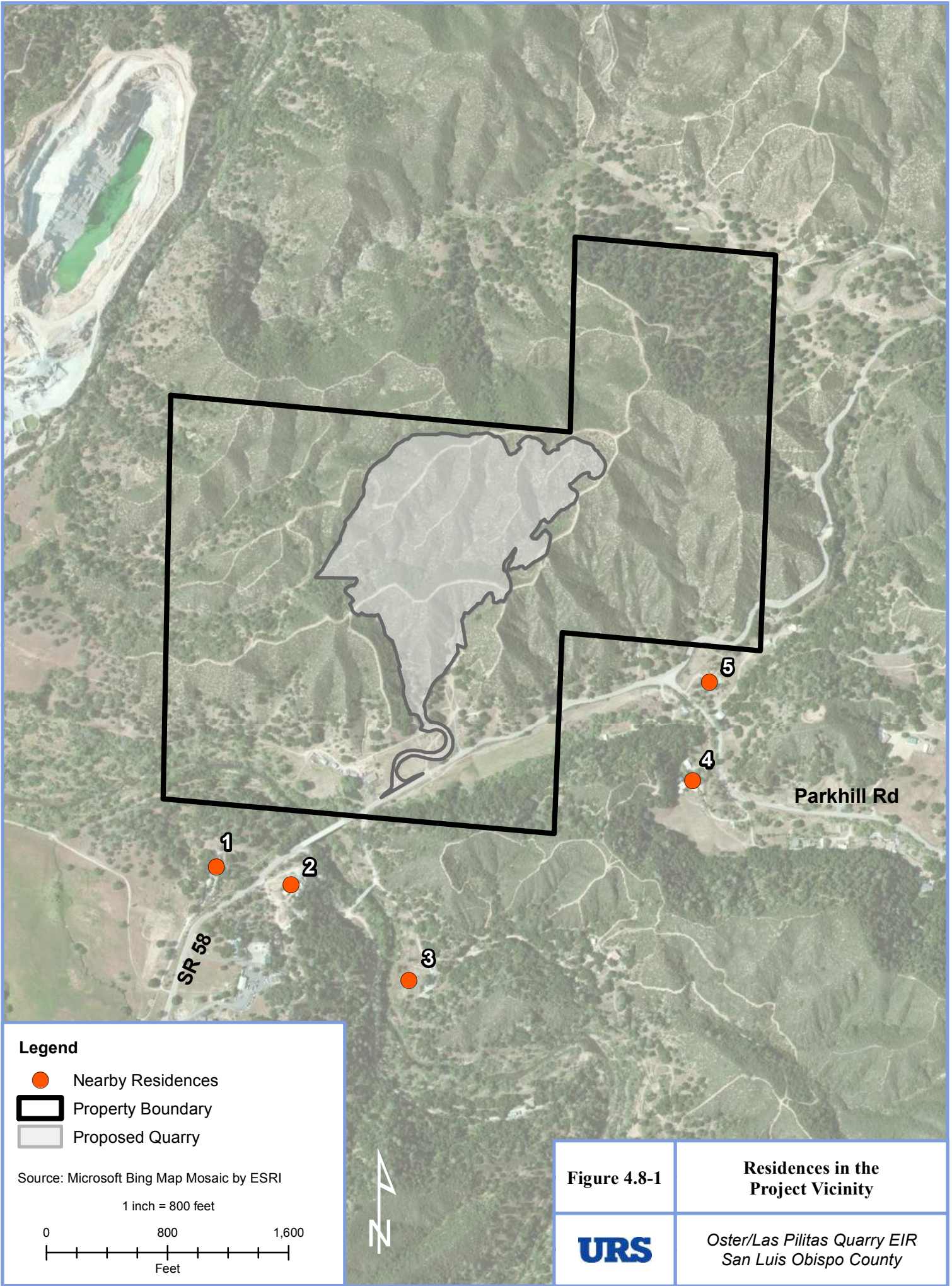


Figure 4.8-1

Residences in the Project Vicinity



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

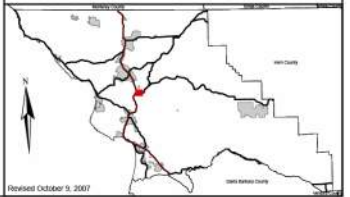
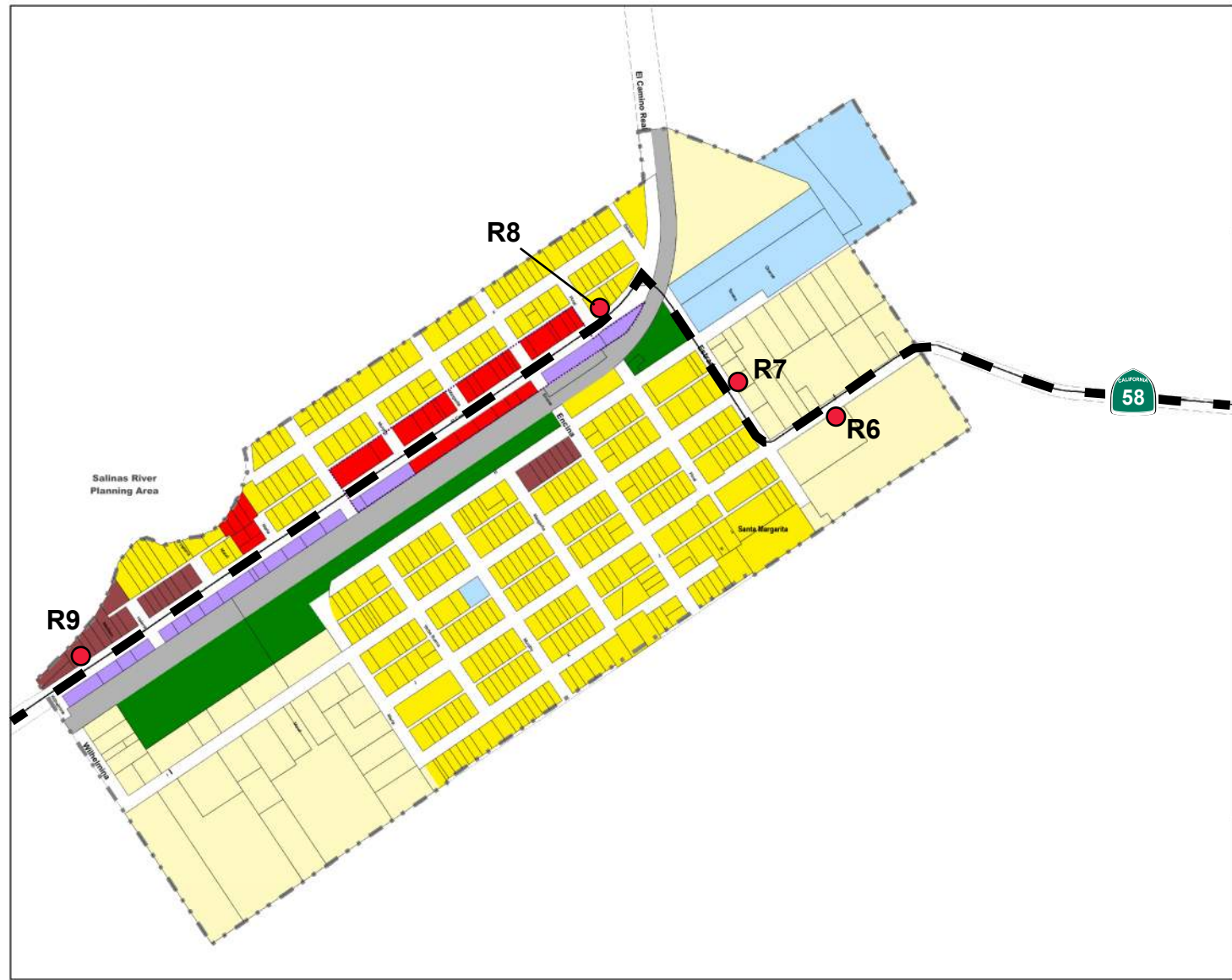


DEPARTMENT OF PLANNING & BUILDING

0 395 790 1,580
Feet

**SANTA MARGARITA URBAN RESERVE LINE
LAND USE CATEGORIES**

- LEGEND**
- Central Business District
 - Santa Margarita Urban Reserve Line
- Land Use Category**
- Commercial Retail
 - Commercial Service
 - Industrial
 - Open Space
 - Public Facility
 - Recreation
 - Residential Multi Family
 - Residential Suburban
 - Residential Single Family



- R6** - Typical Residence
- SR 58 Route

Map Source: County of San Luis Obispo
Department of Planning and Building

Figure 4.8-2

**State Route 58 and
Typical Residential Locations**



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*

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PUBLIC SERVICES AND UTILITIES**

4.9 PUBLIC SERVICES AND UTILITIES

4.9.1 Existing Conditions

The proposed surface mining operation is located north of both SR 58 and the Coastal Branch of the California Aqueduct, approximately 3 miles northeast of the unincorporated community of Santa Margarita. The nearest San Luis Obispo County Sheriff station is located in Templeton, approximately 15 miles to the northwest. The nearest fire station, Parkhill Station #40, located approximately one mile to the southeast of the site, is staffed by the San Luis Obispo County Fire Department, through a contract with CalFire. The site is located within the Atascadero Unified School District. No urban services (i.e., water or wastewater) are presently provided to the site.

4.9.2 San Luis Obispo County Plans and Policies

Table 4.9-1 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan that are applicable to Public Services and Utilities issues relative to this proposed surface mining operation.

**TABLE 4.9-1
POLICY CONSISTENCY ANALYSIS – PUBLIC SERVICES**

Source	Policy Statement	Discussion	Preliminary Determination
Land Use Element Planning Principle 1, Policy 2	Keep the amount, location and rate of growth allowed by the Land Use Element within the sustainable capacity of resources, public services and facilities.	The proposed project's scale of potential employment is not large enough to cause a large migration of people to the area and cause a strain on any of these factors.	Potentially Consistent
Land Use Element Planning Principle 5, Policy 3	Coordinate land use and transportation planning to ensure that all transportation demands can be safely and adequately accommodated.	CalTrans, Public Works, and the Planning Department have been part of the planning process. The project will be compliant with all transportation demands.	Potentially Consistent
Safety Element Policy S-13	New development in fire hazard areas should be configured to minimize the potential for added danger.	CALFIRE has been contacted and responded with their recommendations. The project will be compliant with these recommendations.	Potentially Consistent
Safety Element Policy S-14	Ensure that adequate facilities, equipment, and personnel are available to meet the demands of fire fighting in San Luis Obispo County based on the level of service set forth in the fire agency's master plan.	CALFIRE has been contacted and responded with their recommendations. The project will be compliant with these recommendations.	Potentially Consistent

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4.9.3 Regulatory Setting

Other than the regulations stated in the “Commercial Fire Plan Review” letter from Cal Fire/San Luis Obispo County Fire Department, dated July 9, 2010, no unique regulations apply to the delivery of public services to the project site.

4.9.4 Assessment Methodology

Through the Notice of Preparation process, public service agencies were requested to identify potential problems they might encounter in providing services to the project site.

4.9.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Public Services/Utilities within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will result in the (unmet) need for new or altered public services in one or more of the following areas: fire protection; police protection; schools; roads; solid waste or other public facilities.

4.9.6 Project Impacts and Mitigation Measures

The project will contribute to an increase in some public service demands (police and fire), but existing service providers indicated that they can meet these demands without adversely affecting their services provided to other areas of the County. In fact, on February 8, 2014, Laurie Donnelly, Battalion Chief/Fire Marshal for CalFire/San Luis Obispo County Fire Department, reported that: “From a strictly operational point of view, the proposed project does not present a significant concern relative to emergency vehicle response(s) upon Hwy 58 either east or west of the project site.” The project will not affect schools. The applicant will be required to pay applicable public facility fees, in accordance with Title 18 of the San Luis Obispo County Code (Public Facilities Fee Ordinance). Public Service impacts are considered potentially significant but mitigable, upon payment of these fees.

Description of Impact	Mitigation Measure	Residual impact
IMPACT PS-1: Increase in Fire Hazards. The project will contribute to an increase in fire hazards by introducing sources of ignition including: blasting and construction equipment, into a high fire hazard severity zone.	MM PS-1: Increase in Fire Hazards. Mitigation HAZ-5 serves as adequate mitigation for Impact PS-1.	Less than significant
IMPACT PS-2: Demand for Public Services. The project will contribute a small increment to demand for other public services, which can be provided by the appropriate public service	MM PS-2: Demand for Public Services. Since this effect is less than significant, no mitigation is required.	Less than significant

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Description of Impact	Mitigation Measure	Residual impact
providers (police, schools, roads and solid waste).		

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

This project, along with others in the area, will have a cumulative effect on road facilities as well as police and fire protection, and will not affect schools. The project's cumulative impacts are within the general assumptions of growth projected in this area. Public facility (Title 18 of the San Luis Obispo County Code), and school (State Government Code 65995 et seq.) fee programs have been adopted to address this impact. Additionally, the project is subject to Section 22.36.110 that may require payment of fees to the County Public Works Department for impacts to County roads which will be implemented as a condition of approval.

In summary, due to the relatively small amount of impacts to public services from the proposed project and the existing Hanson Quarry, as well as adopted fee programs, potential cumulative impacts to Public Services and Utilities are less than significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT PS-3: Cumulative Effects related to Public Services and Utilities. This project, along with others in the area, will have a cumulative effect on road facilities as well as police and fire protection, and will not affect schools.	MM PS-3: Cumulative Effects related to Public Services and Utilities. Since this effect is less than significant, no mitigation is required.	Less than significant

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4.10 RECREATION

4.10.1 Existing Conditions

San Luis Obispo County Parks Department manages approximately 15,000 acres of parkland providing a variety of active and passive recreational facilities. Within the County of San Luis Obispo there are roughly 23 parks, 3 golf courses, and 8 “Special Places” (i.e., natural areas, coastal access areas, and historical facilities) operated by the County Parks Department. Urban regional parks account for about 644 acres; rural regional parks for about 11,398 acres; and mini, neighborhood, and community parks for about 214 acres (San Luis Obispo County 2006:12).

The County’s major camping, fishing and boating facilities are located at Santa Margarita Lake Regional Park and Lopez Lake Recreation Area. Although both parks are in rural settings, Santa Margarita Lake Regional Park (which is 8 miles southeast from the project site) has a more rustic feeling. This park provides scenic views, an extensive trail system, limited camping, and a peaceful setting. The closest park to the project site is Santa Margarita Community Park located approximately 2.4 miles to the southwest.

In addition, there is a proposed trail corridor located along the Salinas River as identified in the Parks and Recreation Element (Chapter 8, Table 5(b) page 65 and Map H). This proposed Salinas River Trail Corridor crosses generally through the southwest corner of the project site (Map H).

4.10.2 San Luis Obispo County Plans and Policies

County goals, objectives, and policies related to parks and recreation are described in the General Plan Parks and Recreation Element (San Luis Obispo County 2006). Many of these policies relate to regional concerns and the activities of the County and other agencies in developing recreational facilities, and do not relate to the evaluation of individual private projects. Several policies relate to the development of trail systems such as the Salinas River Trail, and these are addressed in Table 4.10-1 below.

4.10.3 Regulatory Setting

California Quimby Act Fees (Parkland Fees) are not applicable to the project since the project is a commercial use and not residential. There are no other specific regulations that affect recreational resources on or near the project site.

4.10.4 Assessment Methodology

The impact assessment in this EIR is based on a review of existing County recreational facilities and the proximity to the project site. Representatives of the San Luis Obispo County

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**TABLE 4.10-1
POLICY CONSISTENCY ANALYSIS – RECREATION**

Source	Policy Statement	Discussion	Preliminary Determination
Parks and Recreation Element/Policy 3.7	Trail Project Priority Criteria.	List of criteria for highest priority trail projects in the county.	Not applicable to project. Applies to County agencies.
Parks and Recreation Element/Policy 3.8	Trail Provisions to Protect Adjacent Land Use and Environment.	A list of provisions for trail projects to protect adjacent land uses and the environment. Most apply to specific design of trail when it is developed.	Not applicable to quarry project. Applies when specific trail is proposed by County.
Parks and Recreation Element/Policy 3.9	County Agencies Coordination.	County agencies will work together to coordinate the development, maintenance and use of trails.	Not applicable to project. Applies to County agencies.
Parks and Recreation Element/Policy 3.10	Extensive trail system shall be developed in viable segments.	Extensive trail systems such as the Salinas River Trail shall not be constructed until a viable link can be established.	Potentially Consistent.
Parks and Recreation Element/Policy 3.11	Eminent domain will not be used for trail establishment.	Eminent domain will not be used for trail establishment.	Consistent.
Parks and Recreation Element/Policy 3.12	Criteria for when private property may be considered for a trail easement.	A discussion of instances when a public trail, a trail dedication in easement or fee across private property shall be considered and may be obtained. 3.12.3. c. identifies consideration of a trail easement as a condition of project approval for a CUP.	Consistent.
Parks and Recreation Element/Policy 3.13	Trail dedication requirements as a condition of approval.	A discussion of criteria for a trail dedication as part of a discretionary permit.	Consistent.
Parks and Recreation Element/Policy 3.14	Required Finding for acceptance of a public trail corridor.	The approving authority must make findings that: 1) Sufficient funds are available for the trail's ongoing maintenance; and 2) The liability for the trail has been addressed pursuant to Policy 3.15.	Not applicable to quarry project. Consistency would occur at time of trail development.

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**TABLE 4.10-1 (CONTINUED)
POLICY CONSISTENCY ANALYSIS – RECREATION**

Source	Policy Statement	Discussion	Preliminary Determination
Parks and Recreation Element/Policy 3.15	County shall fully indemnify, protect and hold harmless private property owners who dedicate or grant a public trail easement.	Indemnification would accompany acceptance of easement or construction of trail.	Not applicable to quarry project. Consistency would occur at time of trail development.
Parks and Recreation Element/Policy 3.16	Abandoned public trail easement.	The County shall assure that if a public trail easement is abandoned, or if the liability acceptance is discontinued, the trail easement shall revert to the underlying property owner(s).	Not applicable to quarry project.

Parks Department were consulted regarding potential recreational concerns in relation to the proposed project.

4.10.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Recreation within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Increase the use or demand for parks or other recreational opportunities, such that substantial physical deterioration of the facility would occur or be accelerated; and/or
- b. Affect the access to trails, parks, or other recreational opportunities; and/or
- c. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.10.6 Project Impacts and Mitigation Measures

Increased Use or Demand

Demand for park and recreational facilities is closely related to changes in population and housing. Increased demand for park and recreational facilities would be anticipated if a project would be a significant source of new population and/or housing. The project is a commercial quarry operation that does not include any new housing and is not a significant source of new population as identified in the initial study. Therefore, the proposed project would not generate a significant increase in use or demand for park and recreational facilities

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and would not contribute to or accelerate the deterioration of any park and recreation facilities. The project impact related to the demand for recreational facilities is less than significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT REC-1: Increase Use or Demand for Recreational Facilities. The project may potentially increase population and/or provide new housing, and it may potentially increase the demand for recreational facilities.	IMPACT REC-1: Increase Use or Demand for Recreational Facilities. Since this effect is less than significant, no mitigation is required.	Less than significant

Effect on Access to Trails, Parks or Other Recreation Opportunities

The proposed quarry site is approximately 1,000 feet from the Salinas River corridor at its closest point. A portion of the proposed Salinas River Trail Corridor generally crosses through the southwest corner of the project site. The construction and operation of the quarry will have no direct effect on access to any future trail in this area or on recreational activities such as hiking that may occur along the trail. However, allowed uses in the Rural Lands category on the balance of the site include agricultural activities and improvements related to agricultural operations. It is possible that these future uses may pose a conflict with the development of the future Salinas River Trail and/or may be incompatible with the recreational uses along this future trail.

However, the inclusion of a new trail easement on the larger subject property is addressed in this EIR since a discretionary action (Conditional Use Permit [CUP]) is required for the quarry and the County may include the offer of a trail easement as a condition of approval for the CUP, in accordance with Policy 3.12.3.c in the Parks and Recreation Element (San Luis Obispo County 2006:28). County policies also require that extensive trail systems such as the Salinas River Trail shall not be constructed on individual properties until a viable link can be established to create a larger trail. Acceptance Development of a trail corridor by the County must meet required findings including sufficient funds for ongoing maintenance and liability. Planning for trail development is a long-term process and there is not currently a viable planned segment that includes the project site. For this reason, only a very general description of a future trail on the property can be considered at this time.

Since the Salinas River is the unifying feature and most aesthetic focus for the regional trail system, it is reasonable to expect that the future trail will be located generally along the river itself, as opposed to a location along ridgelines or slopes in the area. Such a location would be well removed from the proposed quarry (by over 1,000 feet), but would occur in the general vicinity of existing grazing and agricultural operations on the property. For this reason, any future trail design would have to be developed with the property owner input,

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and would have to include appropriate fencing for the safety of trail users and the security of the property owner. The land near the river on the property is relatively flat, and consists mainly of a mixture of non-native grasses underneath oak trees. It is likely that a trail could be designed that would require minimum ground disturbance and drainage control, and would preserve all or most of the oak trees present. A more detailed evaluation of the potential environmental effects of such a future trail would have to be prepared by the County at the time a specific trail is proposed. In summary, this effect is considered a potential significant impact that can be mitigated.

Other recreational opportunities that could be impacted by project related heavy truck traffic are recreational bicyclists traveling along SR 58. To a lesser degree, commuter bicyclists may also be impacted by the increase in heavy truck traffic associated with the proposed project. Commuter bicyclists are not expected in large number along the haul route during operational hours of the proposed quarry (Mon – Fri: 6:00 a.m. to 5 p.m.) and are not typical in rural locations such as the project site. Recreational bicyclists are more likely to use SR 58 on the weekends when the quarry is not operating.

Recognizing the above referenced use differences, when project related heavy vehicles and bicyclists interact along SR 58, the addition of project related heavy vehicles would likely result in the bicyclists’ perception of a decreased Bicycle Level of Service (BLOS) or a lessening of their perceived experience cycling on the roadway. This perception could result in a disincentive for bicyclists to use SR 58 during operational hours of the quarry. Please refer to Section 4.11.6 [Bicycle Level of Service (BLOS) SR 58] for additional discussion regarding BLOS.

The project’s increase in heavy vehicle traffic will require mitigation in the form of a monitoring program or mitigation fee (refer to MM TRAFFIC-4b) to mitigate increased pavement degradation on SR 58. Improvements resulting from the mitigation associated with impacts to SR 58 will include review of required project improvements and repairs along SR 58 under the Caltrans “Complete Streets Program” (e.g., Complete Streets Implementation Action Plan, prepared by Caltrans to Implement Deputy Directive 64-R1) prior to construction. Appendix G contains the most recent version of this document as of the publication date of this EIR. This review will include an analysis to determine the appropriateness of providing shoulders, restriping and/or other improvements to ensure all travelers (including bicyclists) can be accommodated on the State highway system. In summary, this effect is considered a potential significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual impact
IMPACT REC-2a: Access to Future Salinas River Trail. Future agricultural uses, as allowed by the Rural Lands category, may pose a	MM REC-2a: Access to Future Salinas River Trail. Prior to issuance of a Notice to Proceed, the property owner shall offer a future trail easement for dedication to the County, along the Salinas River Trail corridor,	Less than significant

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<p>conflict with the development of the future Salinas River Trail and/or may be incompatible with the recreational uses along this future trail.</p>	<p>subject to conditions and County policies to coordinate trail development and to protect public safety and property owner rights. The offer of dedication shall be a minimum of 40 <u>25</u> feet in width and be located adjacent to the Salinas River (outside of the creek corridor). The final location of the offer of dedication shall be determined in consultation with the Parks Department.</p>	
<p><u>IMPACT REC-2b: Conflict with Bicyclists along SR 58. Heavy vehicle traffic associated with the proposed project may conflict with bicyclists traveling along SR 58.</u></p>	<p><u>MM REC-2b: Conflict with Bicyclists along SR 58. Mitigation Measure TRAFFIC-4b serves as adequate mitigation for Impact REC-2b.</u></p>	<p><u>Less than significant</u></p>

Cumulative Effects

The project is about one-half mile distance from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

San Luis Obispo County Parks Department manages approximately 15,000 acres of parkland. Development of the larger Salinas River Trail system would have a positive recreational benefit. It may also have relatively minor adverse environmental effects associated with trail construction and increased human activity along the riparian corridor of the river. These types of effects are associated with all recreational trails and would have to be evaluated at the time when a specific trail alignment and design are formulated, which is when measures to minimize any adverse effects could also be identified. The applicant is requesting an approval for a quarry that would have a life of at least 25 years (or longer) and without the offer of dedication could potential result in fragmentation of the Salinas River Trail for a minimum of 25 years. Without the offer of dedication, the project could potentially result in impacts to County trail systems, as would all projects on lands adjacent to the Salinas River. Through the planning and environmental review of projects in the region, however, and implementation of County policies and other requirements, the potential effects on the Salinas River corridor and trail system would be less than significant.

The contribution of the projects heavy truck traffic to existing heavy truck traffic and future heavy trucks along this route is considered a potentially significant impact to recreational bicyclists that can be mitigated through implementation of mitigation measures Traffic-4b. If future quarries are approved in the vicinity and heavy vehicles also travel along SR 58, their

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contribution to maintenance of State highway facilities will also be reviewed under Caltrans Complete Streets Program.

In summary, due to the non-residential nature of this quarry and the Hanson Quarry, ~~and~~ the offer of dedication for the trail alignment, and repair / maintenance of SR 58 under Caltrans's Complete Streets Program required by Mitigation Measure Traffic-4b, potential cumulative impacts to Recreation are less than significant.

Description of Impact	Mitigation Measure	Residual impact
IMPACT REC-3: Cumulative Effects related to Recreation. Development of the proposed project and future quarries in the region, along with future residential development in the vicinity of the Salinas River, may encroach on or adversely affect the Salinas River corridor and reduce its natural resource and recreational values.	MM REC-3: Cumulative Effects related to Recreation. Since this effect is less than significant, no mitigation is required.	Less than significant

4.11 TRANSPORTATION AND CIRCULATION

4.11.1 Existing Traffic and Transportation Conditions

The information in this section of the EIR was developed through several sources. A Transportation Impact Analysis was prepared by Fehr and Peers (2006) for the Santa Margarita Ranch project, and this report provides a compilation of background information relevant to traffic analysis in the community. The applicant for the quarry project addressed in this EIR submitted a Traffic Impact Study prepared by TPG Consulting Inc. (2009), which analyzed the morning and evening peak hour effects of the project under different scenarios at four intersections: the proposed quarry driveway, and three intersections in the region. That report was peer reviewed by Associated Transportation Engineers (ATE) as part of the preparation of this EIR. ATE also analyzed different traffic issues not addressed in the original TPG report, which were identified by the County and by representatives from Caltrans for inclusion in this EIR. These issues included roadway pavement conditions, the operation of the SR 58/US Highway 101 interchange (particularly the southbound on-ramp to US Highway 101) and the SR 58 operations through Santa Margarita in the vicinity of the existing park-and-ride facility. The passage of heavy trucks through these areas is of concern, and was also mentioned in comments received during the scoping period for this EIR. Finally, ATE updated the main intersection analysis for this study (SR 58 at Estrada Avenue/El Camino Real) based on more recent (increased) projections of both the project generated traffic and the traffic anticipated from existing and recently approved projects in the vicinity.

Appendix C to this EIR contains the data and tables related to the ATE analysis; this Appendix also contains copies of the previous traffic impact studies mentioned above. The following paragraphs describe the conditions in the study area and issues that were addressed in the preparation of this EIR.

Roadways and Traffic Volumes

The proposed rock quarry would be located on the north side of SR 58, just east of the Salinas River approximately three miles northeast of the Santa Margarita Community. Figure 4.11-1 shows the project location and the roadways, intersections and other features discussed in this section of the EIR. Table 4.11-1 below describes the streets in the project vicinity. The estimates of the existing Average Daily Traffic (ADT) volumes are from Caltrans and County Public Works Department data.

SR 58 originates at US Highway 101 west of Santa Margarita and crosses through the community of Santa Margarita parallel to the Union Pacific Railroad tracks on El Camino Real. At the northeastern edge of Santa Margarita, eastbound SR 58 turns right (southeastward) onto Estrada Avenue for four blocks, and then turns left and continues northeastward as Calf Canyon Highway. Through the downtown area of Santa Margarita, the

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**TABLE 4.11-1
STUDY AREA STREET SYSTEM**

Street	Classification	Number of Lanes (2 Directions)	Posted Speed	Average Daily Traffic Volume
SR 58 ¹ (through Santa Margarita)	Principal Arterial	2	35–55	7,200 ³
El Camino Real (north of Santa Margarita)	Arterial	2	35–55	4,000 ⁴
Estrada Avenue	Arterial (SR 58 portion) and Local Street	2	25–35 ²	2,900 (3, east of J Street)
H Street	Local Street	2	25	Not counted
W Pozo Road	Arterial and Collector	2	55	1,112 ⁴
Calf Canyon Highway (SR 58 east of Santa Margarita)	Rural Road	2	55	925 ³

¹ Portions of El Camino Real, Estrada Avenue, W. Pozo Road, and Calf Canyon Highway are all designated as State Route 58.

² 25 MPH posted for school zone.

³ Caltrans 2012.

⁴ San Luis Obispo County 2012 (traffic counts from the Department of Public Works).

highway consists of two 12-foot-wide travel lanes within a right-of-way that is up to 100 feet wide. There is a striped center left turn lane for three blocks between Murphy and Pinal Avenues. State Route 58 through Santa Margarita is classified as a Principal Arterial intended to carry traffic on trips connecting population centers (San Luis Obispo County 2003:page 5-4).

El Camino Real is classified as an arterial from the point where it meets SR 58 at Estrada Avenue, northward into and through the City of Atascadero. As an Arterial, its function is to carry traffic between principal arterial roads (i.e., SR 58) and centers of population (Atascadero). El Camino Real has two travel lanes and a striped (class 2) bike lane on its east side between Santa Margarita and Atascadero.

Estrada Avenue, between El Camino Real and J Street, serves as SR 58 and is classified as an arterial roadway by San Luis Obispo County (2007). South of J Street Estrada Avenue is classified as a local street. The Santa Margarita Elementary School is located just east of Estrada Avenue adjacent to the H Street intersection. More information about the crosswalk on Estrada Avenue is provided below.

H Street is a collector street parallel to SR 58 (El Camino Real) through Santa Margarita on the south side of the UPRR tracks. It crosses Estrada Avenue, and provides access to the Santa Margarita Elementary School.

Calf Canyon Highway starts on J Street just northeast of Estrada Avenue (on some maps), and is a two lane rural road through the rest of the County Las Pilitas Planning Area. From J

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Street eastward to the intersection with West Pozo Road is about 1.28 miles, and from this point the highway turns to the northeast and continues another 1.8 miles to the project entrance. This segment is a typical rural highway with shoulders ranging from two to four feet in width and a 55 mile per hour speed limit. Caltrans lists SR 58 from J Street eastward as a 30-foot kingpin-to-rear-axle (KPRI) advisory route. This listing means that trucks with a longer KPRI length may not be able to remain within their travel lane. Such trucks may still legally use the highway, but their drivers may be subject to ticketing by the Highway Patrol if the trucks move outside of their travel lanes (“offtrack”). Besides the 90-degree curve on SR 58 at J Street where this advisory begins, there are two other segments of steep curves along the highway that are the subject of this listing. Both of these segments are eastward from the project site and would not generally affect project-related traffic. The tractor/semi-trailer/full trailer hopper trucks commonly used in the aggregate industry (“doubles”) are capable of navigating the steep curvy portions of SR 58 without offtracking. The 90-degree curve at J Street is discussed in more detail below.

West Pozo Road is a two-lane County roadway, and is classified as an arterial within the Salinas River Area Plan (San Luis Obispo County 2008), and as a collector within the Las Pilitas Area Plan (San Luis Obispo County 2008).

School Crosswalk on Estrada Avenue

Field observation by ATE found that there are brief periods of the day when SR 58 traffic operations are affected by school traffic on Estrada Avenue and H Street. For the 2011–2012 school year, the school day currently begins at 8:20 a.m. for all students. Kindergarten dismissal is at 1:40 p.m. and Grades 1–6 are dismissed at 2:40 p.m. (except for Fridays, when Grades 1–6 are dismissed at 1:40 p.m.). Access to the school is provided via the east leg of the Estrada Avenue/H Street intersection. A school crossing guard is present at the crosswalk located at the intersection to assist school children crossing the street. Pedestrian counts collected at the intersection found a total of 12 pedestrians crossed Estrada Avenue at the H Street intersection during the morning period at the start of the school day and 29 crossed the intersection during the afternoon period at the end of the school day. The speed limit on Estrada Avenue is 25 MPH during the morning and afternoon periods when children are present. Based on the ATE observations, there are no significant operational issues at the school crossing and pedestrians and drivers were generally observant of one another. Morning and afternoon traffic peaks sometime cause queuing on Estrada Avenue, with the peak periods lasting approximately 10–15 minutes just prior to the start and end of the school day. Warning signs with pictures and text mark the presence of the school crossing from both directions on Estrada Avenue. The segment of Estrada Avenue southeast of H Street (school crossing) also has a slight rise that tends to obstruct the view of the school crossing itself for drivers heading northwest (towards the school crossing) from the southeast. For westbound traffic on J Street turning right onto Estrada Avenue, there is a 15 MPH curve warning sign (but no similar sign for eastbound traffic).

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Truck Traffic Volumes

Truck traffic volumes on SR 58 in the project vicinity originate primarily from local sources (the existing rock quarries in the area, rail associated businesses and other heavy commercial centers in Santa Margarita). Caltrans (2012) indicates that the volume of heavy trucks (trucks with three or more axles) on SR 58 in this area is about three percent of the ADT.

SR 58 Curve on J Street

In the eastern corner of Santa Margarita, SR 58 makes a 90-degree turn from Estrada Avenue at J Street and continues towards the northeast. The addition of traffic to this segment and curve of SR 58 from the proposed Santa Margarita Ranch Agricultural Residential Cluster Subdivision was identified as a significant and not mitigated impact in the EIR for that project (San Luis Obispo County 2008, Final Environmental Impact Report for Santa Margarita Ranch 2008: ES-32, ARCS Impact T-1). The Agricultural Residential Cluster Subdivision was approved in 2008, and proposed 111 dwelling units along SR 58 southeast of Santa Margarita. Virtually all of that project traffic would use SR 58, and the increase of 1,154 ADT was considered a significant impact on the operation of traffic through the 90-degree curve on SR 58, in part because of the higher than average accident rate along SR 58 nearby (San Luis Obispo County 2008, Final Environmental Impact Report for Santa Margarita Ranch 2008:4.12-9). The Santa Margarita Ranch Final EIR identified mitigation measures for this impact including installing radar feedback signs and advisory speeds on each approach to the 90-degree curve on SR 58 near J Street (San Luis Obispo County, Final EIR for Santa Margarita Ranch 2008:4.12-25, and Conditions of Approval for Tract 2586, Condition 3a on page 13). The original mitigation measure also included widening both sides of SR 58 along this segment to provide four-foot shoulders and/or bike lanes in accordance with County standards; but at the time the project was approved this widening requirement along with other improvements within the Caltrans right-of-way was determined to be infeasible (San Luis Obispo County, 2008, Santa Margarita Ranch CEQA Findings: page 55). The final condition of approval (Condition 2k. on page 13) requires either widening of SR 58 along both sides of the cemetery frontage or a Class I bike path from the cemetery to J Street.

Existing Levels of Service (Intersections and Roadways) and Signal Warrants

There are several different ways to analyze traffic flows and intersections to determine their LOS. The particular method used depends on several factors such as whether a roadway segment or an intersection is being considered, whether or not there are traffic controls at an intersection, and the type of controls present.

The original traffic study for the project considered four intersections in the project vicinity with the potential to be affected by the proposed quarry traffic. Since the project site fronts on SR 58, and SR 58 provides access all the way to US Highway 101, all of these

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intersections are on the state highway and involve crossings with various County roads. The intersections studied are listed in Table 4.11-2 below.

**TABLE 4.11-2
STUDY AREA INTERSECTIONS**

Intersection	Signalized/Unsignalized	Type
Estrada Ave/El Camino Real	Unsignalized	TWSC
Estrada Ave/H St	Unsignalized	TWSC
W Pozo Rd/Calf Canyon Hwy	Unsignalized	TWSC
Calf Canyon Hwy/Project Driveway	NA (does not yet exist)	NA

TWSC = Two-Way Stop Control.

Traffic counts for the three existing intersections in the vicinity are shown in Figure 4.11-2. The figures shown are actually the higher of traffic counts taken in 2006 as part of the Santa Margarita Ranch Transportation Impact Analysis (Fehr and Peers 2006) or those taken in the analysis for this project in 2009 (by TPG) and supplemented with later counts by Caltrans in 2010. In general terms, there has been a decrease in traffic volumes at all of the intersections over the period of 2006–2010.

Levels of Service for Roadways

The County Resource Management System references the Highway Capacity Manual in defining roadway Levels of Service (LOS) as follows (San Luis Obispo County Annual Resource Summary Report, 2011:page I-7):

- LOS “A” Free flow: unlimited freedom to maneuver and select desired speed.
- LOS “B” Stable flow: slight decline in freedom to maneuver.
- LOS “C” Stable flow: speed and maneuverability somewhat restricted.
- LOS “D” Stable flow: speed and maneuverability restricted. Small increases in volume cause operational problems.
- LOS “E” Unstable flow: speeds are low; freedom to maneuver is extremely difficult. Driver frustration is high during peak traffic periods.
- LOS “F” Forced flow: stoppages for long periods. Driver frustration is high at peak traffic periods.

Although the County General Plan (including the Inland Framework for Planning and the Salinas Area Plan) does not include an explicit objective or policy related to traffic Level of Service, the Resource Management System identifies a “Level of Severity” when a roadway Level of Service is predicted to drop to “D” within five years (San Luis Obispo County,

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Annual Resource Summary Report, 2011: page I-6). Thus, the normal County standard for traffic LOS is “C” or better.

For the state highways in the project vicinity, Caltrans has determined that their route concept LOS for operations along US Highway 101 is peak hour LOS D. For SR 58 operations the concept is peak hour LOS E from US Highway 101 to West Pozo Road, and then peak hour LOS D for the remainder of SR 58 eastward to the Kern County line (Caltrans 2009: page 2). These concept LOS values represent projected conditions of the transportation corridor over a twenty-year planning vision assuming that recommended long-term improvements have been implemented (Caltrans 2003:5). The values are used in this EIR are one type of guidance in judging the significance of project effects or of future traffic volumes.

Levels of Service for Intersections

The particular approach used for the intersection analysis in this study is the “operations method” outlined in the Highway Capacity Manual, and was chosen by the project traffic engineers and is recommended by both the County and Caltrans. For the unsignalized intersections studied, this method relies on measuring or calculating the delay time expected during peak hour conditions at the intersection, with the following definitions:

- LOS A: delay less than or equal to 10.0 seconds
- LOS B: delay from 10.1 to 15.0 seconds
- LOS C: delay from 15.1 to 25.0 seconds
- LOS D: delay from 25.1 to 35.0 seconds
- LOS E: delay from 35.1 to 50.0 seconds
- LOS F: delay greater than 50.0 seconds

Table 4.11-3 shows the results of the analysis for the intersection LOS under the existing conditions. All of the existing LOS values are better than D, which is consistent with the fact that none of the intersections in the Santa Margarita community are identified with a “level of severity” in the County Resource Management System.

As part of the intersection analysis, ATE also evaluated existing conditions at the principal intersection of concern: El Camino Real at Estrada Avenue. This is the intersection where southbound El Camino Real makes a sweeping banked curve as it enters the eastern portion of Santa Margarita, and SR 58 makes an angular turn to or from El Camino Real onto Estrada Avenue. The current traffic control is a stop sign for traffic on Estrada Avenue turning onto El Camino Real. The Union Pacific Railroad track is also crossed by Estrada Avenue (SR 58) near this location. ATE performed a 24-hour traffic count at this intersection on a day when

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**TABLE 4.11-3
EXISTING LEVELS OF SERVICE – INTERSECTIONS**

Intersection	Delay/LOS	
	A.M. Peak Hour	P.M. Peak Hour
Estrada Ave/El Camino Real		
WB Left + Thru	4.1 Sec./LOS A	3.8 Sec./LOS A
NB Approach	19.7 Sec./LOS C	12.7 Sec./LOS B
Estrada Ave/H St		
EB Approach	15.2 Sec./LOS C	11.0 Sec./LOS B
WB Approach	12.5 Sec./LOS B	10.2 Sec./LOS B
NB Approach	0.3 Sec./LOS A	0.6 Sec./LOS A
SB Approach	6.1 Sec./LOS A	0.9 Sec./LOS A
W Pozo Rd/Calf Canyon Hwy		
EB Left + Thru	4.6 Sec./LOS A	6.2 Sec./LOS A
SB Approach	9.3 Sec./LOS A	9.3 Sec./LOS A
Calf Canyon Hwy/Project Driveway		
EB Left + Thru	NA	NA
SB Approach	NA	NA

Sec. = seconds of delay.

Santa Margarita Elementary school was in session, and also counted pedestrian and bicycle movements at this location. ATE used criteria contained in the Manual of Uniform Traffic Control Devices published by Caltrans, and evaluated nine warrants to determine the need for traffic signal control at the intersection under the existing conditions. One of the Signal Warrants relates to accidents at the intersection. The minimum criterion for consideration of a traffic signal is five or more correctable accidents per year, and is typically based on the most recent three-year data compiled by Caltrans. There were no accidents at this intersection during the three-year period covered by accident data provided to ATE by Caltrans (2007–2010). A more recent compilation of accident data by Rick Engineering Co. (2012) showed a single collision at this intersection in January 2007, which occurred before the period covered by the ATE review. These results show a substantial reduction from the accident rate reported by Fehr and Peers (2006: Table 10), who listed six accidents for the same intersection with data from the three-year period from August 2002 to July 2005.

Table 4.11-4 below presents the results of the ATE Signal Warrant evaluation, and indicates that under the existing conditions, based on traffic volumes and roadway operational criteria, a signal at this location is not warranted. Based on Signal Warrant 9, however, which deals with peak hour traffic volume and the proximity of railroad crossings, under the existing conditions a signal may be warranted at this location. This is because under the Signal

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Warrant 9 criteria, given the existing peak hour volumes, the minimum distance between the center of the nearest railroad track and the stop line should be 140 feet. On Estrada Avenue, this distance is about 78 feet: more than enough to accommodate a large truck, but still not meeting the Signal Warrant criteria. It should also be noted that the decision to install a traffic signal should consider other engineering factors, and must be made in consultation with Caltrans, for state routes. The specific language from this standard states: “The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal” (Caltrans 2012:Section 4C.01). In addition, the State Public Utilities Commission has advised, relative to railroad crossings: “the new traffic signals must be interconnected with the existing railroad automatic warning devices for the system as a whole to operate effectively. Adding preemption (traffic signal prioritization) to the new signalized intersection will clear any vehicles queued at the crossing prior to train arrival.”

**TABLE 4.11-4
ESTRADA AVENUE/EL CAMINO REAL SIGNAL
WARRANTS – EXISTING CONDITIONS**

Warrant #	Type	Warrant Satisfied
1	Eight-Hour Vehicular Volume	No
2	Four-Hour Vehicular Volume	No
3	Peak Hour	N/A ¹
4	Pedestrian Volume	No
5	School Crossing	No
6	Coordinated Signal System	N/A ²
7	Crash Experience Warrant	No
8	Roadway Network	No
9	Intersection Near (RR) Grade Crossing	Yes

¹ Peak Hour Warrant not applicable.

² Coordinated Signal System not applicable.

US Highway 101/SR 58 Ramps

In response to concerns raised during the scoping period, ATE performed an analysis of the operations along the US Highway 101 mainline and the merge/diverge/weave movements at the US 101 and SR 58 ramps. The traffic counts at these locations are shown in Figure 4.11-2. Following procedures in the Highway Capacity Manual, ATE analyzed each of the locations at the interchange based on the density of traffic expressed as passenger car equivalents per lane per mile. The relationship between traffic density and LOS is different for the highway mainline and the ramps; more information is provided in the traffic appendix (specifically, in Fehr and Peers 2006:11-13). The results, along with the corresponding LOS for the existing conditions are shown in Table 4.11-5 below. During the peak hours, the

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northbound main segment of US Highway 101 and all of the ramps at this interchange, operate at LOS D. All locations under the existing conditions are consistent with or better than the Caltrans route concept of peak hour LOS D for US Highway 101 operations.

**TABLE 4.11-5
EXISTING LEVELS OF SERVICE –
US 101/SR 58 INTERCHANGE**

Mainline or Ramp	Time Period	Lanes	Operations ¹	
			Density	LOS
Mainline Segment				
U.S. 101 northbound n/o SR 58	A.M. Peak	2	9.1	LOS A
	P.M. Peak		24.1	LOS C
U.S. 101 northbound s/o SR 58	A.M. Peak	2	9.0	LOS A
	P.M. Peak		26.8	LOS D
U.S. 101 southbound n/o SR 58	A.M. Peak	2	21.0	LOS C
	P.M. Peak		11.4	LOS B
U.S. 101 southbound s/o SR 58	A.M. Peak	2	23.7	LOS C
	P.M. Peak		11.7	LOS B
Ramp Junction				
SR 58 northbound on-ramp	A.M. Peak	1	14.2	LOS B
	P.M. Peak		29.7	LOS D
SR 58 northbound off-ramp	A.M. Peak	1	15.1	LOS B
	P.M. Peak		34.8	LOS D
SR 58 southbound on-ramp	A.M. Peak	1	29.2	LOS D
	P.M. Peak		16.9	LOS B
SR 58 southbound off-ramp	A.M. Peak	1	29.3	LOS D
	P.M. Peak		18.0	LOS B

¹ Density = passenger car equivalents per lane per mile. LOS based on density.

**TABLE 4.11-6
US HIGHWAY 101/SR 58 ACCIDENT RATES**

Facility	Accident Rates	
	Actual	State Average
SR 58 southbound on-ramp to U.S. 101	0.99	0.35
SR 58 southbound off-ramp from U.S. 101	0.00	1.10
SR 58 northbound on-ramp to U.S. 101	0.00	0.30
SR 58 northbound off-ramp from U.S. 101	0.00	0.35

Accident rates expressed as # accidents per million vehicle miles.

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Accident rate data was also reviewed for this interchange, and compared with that for ramps with similar characteristics. In the recent three-year period (August 1, 2007 through July 31, 2010) there were two accidents in this interchange, both on the SR 58 to US 101 southbound ramp. One involved a single vehicle striking a fixed object (sign pole or tree) and the other was a rear-end collision involving two passenger vehicles. The accident rates are shown in Table 4.11-6 below, and are compared with state averages for ramps with similar characteristics. This comparison indicates that the recent accident rate at this interchange is generally lower than statewide averages. This result is an improvement when compared to the collision rate over the period of August 2002 – July 2005 that was reported by Fehr and Peers (2006: Table 10).

SR 58 Park-and-Ride Lot

At the request of Caltrans, ATE performed observations and a review of traffic operations along SR 58 in the vicinity of the park-and-ride on the south side of the highway, just east of US 101. Caltrans (2012) indicates that there are 16 spaces in this lot. There are striped points for entry and exit, but no curbs or other control structures are present. A utility access frontage road also joins SR 58 at this park-and-ride lot, but a gate restricts access to authorized vehicles only. Operations at the park-and-ride lot were assessed by determining if sufficient gaps are available in the SR 58 traffic stream for vehicles to enter and exit the park-and-ride. Traffic counts were collected during the A.M. and P.M. commuter periods at the park-and-ride lot. Gap analysis was performed using Highway Capacity Manual procedures. The analysis found minimal delays for vehicles entering/exiting the park-and-ride lot during the A.M. and P.M. peak commuter periods, indicating that gaps are sufficient for turning into and out of the lot. Delays are less than 10 seconds for vehicles entering the lot and less than 15 seconds for vehicles leaving the lot. The field review determined that the sight distances are adequate for vehicles to enter/exit the lot. No operational issues were observed at the park-and-ride lot. The San Luis Obispo Council of Governments (SLOCOG) lists restriping and expansion of this park and ride lot as a mid-term project expected in the period of 2016 to 2020, in its 2010 Regional Transportation Plan (SLOCOG 2010:Table 6-1, page 6-23).

The remaining transportation topics were researched by TPG for the project traffic report, and were reviewed and confirmed by ATE for this EIR. The following paragraphs are based primarily on the TPG descriptions for these facilities.

Transit Service

Currently, the Regional Transit Authority (RTA) operates one transit route in the study area. Route 9, operates between San Miguel, Paso Robles, Templeton, Atascadero, Santa Margarita, and San Luis Obispo; however, the San Luis Obispo Regional Transit Authority, as an independent public agency, may change its routes and schedules from time to time, to

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accommodate ridership patterns. Since this route does not currently operate a stop within walking distance of the Project site, no employee trips are anticipated to utilize transit.

School Bus Service

The Atascadero Unified School District operates three bus routes that travel through the study area. Routes 7 and 8 pick students up from Pozo and Santa Margarita and deliver them to Santa Margarita Elementary (Route 8) and Atascadero High School and Junior High (Route 7). Route 9 picks up students from the rural area between Santa Margarita and Atascadero and delivers them to Santa Margarita Elementary and Atascadero High School and Junior High.

Bike Facilities

Portions of SR 58, in the study area, are designated as a Bike Route with appropriate signing. Shoulder widths vary along SR 58 and cannot always accommodate bicyclists. Bike lanes are located on El Camino Real east/north of its intersection with Estrada Avenue. Bike lanes are located east of SR 58 (outside of the Community of Santa Margarita) starting at Pozo Road and heading southeast. No other designated bicycle facilities are located in the study area by Caltrans or the County of San Luis Obispo.

Pedestrian Facilities

Due to the rural nature of Santa Margarita, sidewalks are limited in the study area. The only sidewalk in the study area is located on the north side of H Street, east of Estrada Avenue. A pedestrian bridge is also located on the north side of H Street, west of Estrada Avenue, to cross a small creek (Yerba Buena Creek). A marked crosswalk is also located on the north side of the Estrada Avenue at H Street intersection. These limited pedestrian facilities serve the Santa Margarita Elementary School.

SR 58 through Santa Margarita is along El Camino Real and consists of two traffic lanes within a 100-foot wide right of way with parking on both sides. There is one striped pedestrian crossing just east (or north) of Encina Avenue, at the Pacific Beverage Company. The Santa Margarita Ranch EIR describes up to 30 pedestrians during both the morning and evening peak hour crossing El Camino Real in Santa Margarita. Most of these pedestrians are shoppers who park their cars and cross at mid-block, disregarding the striped pedestrian crossing (San Luis Obispo County, Final EIR for Santa Margarita Ranch, 2008:4.12-10).

The Santa Margarita Design Plan (San Luis Obispo County 2001: pages I-1, and I-3) identifies a "...landscaped median that provides safer pedestrian crossings..." as part of the vision for Santa Margarita, along with other measures to make El Camino Real/SR 58 more pedestrian-friendly. The Design Plan suggests that future traffic volumes will not justify widening the highway to four lanes, so the existing two lane configuration with left turn

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pockets can be retained. The remaining area within the 100-foot right of way can then be used for "...parking and tree-lined pedestrian pathways or sidewalks" (San Luis Obispo County, Santa Margarita Design Plan 2001: II-8). The pedestrian crossing of El Camino Real/SR 58 at Encina Avenue is within the central business area or "downtown" of Santa Margarita. Within this area, the Design Plan indicates that landscaping and parking should be provided along both sides of the roadway, and a landscaped median should be provided along the center portion of the roadway (San Luis Obispo County, Santa Margarita Design Plan 2001:II-10).

The Final EIR for the Santa Margarita Ranch Agricultural Residential Cluster Subdivision identified potential automobile-pedestrian conflicts as a potential significant impact that could be mitigated. Approval of that project included a condition to install pedestrian flashing warning lights at the pedestrian crossing of El Camino Real at Encina Avenue (San Luis Obispo County 2008 Santa Margarita Ranch Final EIR 2008:4.2-32, and Conditions of Approval for Tract Map 2586, Condition 3c, on page 14).

4.11.2 San Luis Obispo County Plans and Policies

The County of San Luis Obispo General Plan Circulation Element objectives and policies for the project vicinity are found in Chapter 5 of the Inland Framework for Planning document (San Luis Obispo County 2009) and Chapter 5 of the Salinas River Area Plan (San Luis Obispo County 2009 SR). For the most part, circulation objectives and policies are oriented towards the planning of the overall circulation system, defining and accomplishing improvements for various roadway categories, and promoting alternative transportation modes such as transit, and bicycle and pedestrian trail use. Most of these policies do not apply to or directly relate to the proposed quarry project. Applicable policy statements, some of which are only indirectly related to the proposed project, from the Circulation Element are summarized in Table 4.11-7 below.

Several funding sources are used by the County in order to provide capital improvements for the transportation facilities and related improvements to implement the policies noted above. The most important relative to this project is the imposition of traffic impact fees; this mechanism is described in the County paragraphs at the end of the following section.

4.11.3 Regulatory Setting

Federal Regulations

Title 49 of the Code of Federal Regulations includes equipment specifications and other operation requirements related to truck traffic used in interstate commerce and intrastate operations. 49 CFR Parts 171–177 govern the transportation of hazardous materials, including definitions of such materials, placarding requirements, and other items related to safety. 49 CFR Part 300 deals with motor carrier safety in general, and includes equipment

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**TABLE 4.11-7
SUMMARY OF COUNTY CIRCULATION POLICIES**

Source	Policy Statement	Discussion	Preliminary Determination
Inland Framework for Planning, Planning Principle 5: Provide for a variety of transportation choices.	2. Reduce and minimize the generation of air pollutants and greenhouse gases from existing and future development, with emphasis on reducing vehicle miles traveled.	To the extent that the project provides a stable source of aggregate material relatively near the local market, it supports this policy. (Also, consistent with PRC 2711(d) related to developing local sources of roadway construction materials.)	Potentially Consistent
	4. Provide public transit, bicycle lanes, multi-use trails and pedestrian walkways that connect destinations within and between communities, to encourage alternative transportation. Implementation strategy 2 in this same section discusses multi-use trails and their connectivity, consistent with the Parks and Recreation Element.	The Salinas River trail corridor crosses the property but would not be affected by the quarry. It is anticipated the CUP will include a condition to provide a trail easement that will accommodate future development of this trail consistent with applicable Parks and Recreation policies.	Potentially Consistent
Inland Framework for Planning, Chapter 5 Circulation Element, C Goals and Objectives.	2. Plan transportation system improvements to provide for, but not exceed, the capacities that are needed to serve the travel demand generated by the year 2010 population, consistent with the land use patterns allowed by the Land Use Element and the cities' general plans, so that growth is not facilitated or induced in inappropriate amounts or locations.	Proposed quarry does not relate directly to planning or implementing transportation system improvements. It does provide raw material for the construction of highway, bridge, trail, and other improvements. It will contribute towards cumulative traffic increases, but will not directly necessitate roadway improvements beyond what is consistent with the existing land use pattern.	Potentially Consistent
	7. Design a transportation system that provides for safe travel within attainable, feasible economic and technical means.	Proposed project expected to comply with all transportation system requirements and will help provide continued economic source of roadway construction material.	Potentially Consistent
	9. Develop and enhance a system of scenic roads and highways through areas of scenic beauty without imposing undue restrictions on private property, or unnecessarily restricting the placement of agricultural support facilities in agricultural and rural areas.	No formally designated scenic highways in project vicinity. SR 58 is a "suggested scenic corridor" in the Conservation and Open Space Element (in COSE Table VR-2).	Potentially Consistent after the completion of reclamation and revegetation

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and operation safety regulations. The Federal Department of Transportation, Federal Highway Administration, enforces the federal requirements; but in most cases, authority for enforcement is passed down to the states.

California Regulations

The California Vehicle Code (starting at Section 1500 Commercial Motor Vehicle Safety Program, and starting at Section 34600 Motor Carriers of Property Permit Act) adopts federal standards and requirements related to the safe operation of heavy trucks. Hazardous material transport is addressed in Section 32000. Size, weight, and load requirements start at Section 35400. California cannot prohibit trucks that meet federal standards for size and weight from traveling on state highways. The state identifies and publicizes “advisory routes” (also called yellow routes) where trucks with a KPR length over a specified limit (typically 30 feet) may not be able to stay within the defined travelled lane through curves on the highway segment. Caltrans and the California Department of Motor Vehicles oversee the state permit and licensing requirements for heavy trucks, and the California Highway Patrol inspects and enforces regulations.

The specific issue of hauling aggregate loads and their enclosure requirements is addressed in Vehicle Code Section 23114. This section includes a general prohibition against allowing any part of a load to be lost, and include covering requirements. For aggregate loads, a top covering or tarp is not required if the load meets specified freeboard requirements (no part of the load may extend to within six vertical inches of the top of the enclosure).

The California Streets and Highways Code, starting at Section 670, establishes the permit procedure to allow encroachments into the state highway right-of-way. Such permits are necessary for the construction of driveways or any other improvement that will affect the right-of-way, and are obtained from Caltrans.

State Public Utilities Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing. Completion and submittal of a General Order (GO) 88-B Request for Authorization will be required for any proposed work to the crossing along with appropriate project environmental documents per CEQA. The proposed mitigation measure of installing traffic signals at the El Camino Real/Estrada Avenue intersection falls under the criteria requiring a GO 88-B Authorization. Information on filing a GO 88-B Request for Authorization can be found on the Commission’s website: <http://www.cpuc.ca.gov/PUC/safety/Rail/crossings/go88b.htm>.

County Regulations

The County of San Luis Obispo has established a variety of regulatory mechanisms to minimize or avoid potential environmental issues related to traffic during the review and establishment of conditions for development projects. With reference to the Significance

Criteria presented in Section 4.11.5 below, these mechanisms are briefly summarized as follows:

Standards to evaluate Traffic Volume Increases, in terms of acceptable Levels of Service in rural and urban areas are found in the Framework for Planning (Inland) – Chapter 3: Resource Management System; Section 3 – E: Roads/Circulation

Issues related to Traffic Safety and emergency access are addressed in the San Luis Obispo County Public Improvement Standards (adopted by Resolution No. 2011-312); County Code Chapter 22.50 – FIRE SAFETY

With regard to issues related to Access, Parking and Internal Traffic, the following are the relevant County regulations: County Code Chapter 22.18 – PARKING AND LOADING STANDARDS; San Luis Obispo County Public Improvement Standards (adopted by Resolution No. 2011-312)

Issues related to Alternative Transportation Modes are addressed in the Framework for Planning (Inland) – Chapter 5: Circulation Element; Sections C, H, I and J; and in County Code Title 24 – Airport Rules and Regulations

4.11.4 Assessment Methodology

Most of the procedures used in the original traffic study for the project (TPG 2009) and by ATE in their review and update of the traffic analysis are from the Highway Capacity Manual, published by the Transportation Research Board of the National Academy of Sciences (Transportation Research Board 2000). Depending on the specific situation being analyzed (intersection or roadway segment), the LOS was determined based on the particular operational analysis or procedure recommended by Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans 2002:5).

Following the Caltrans guidance, several scenarios were analyzed to determine the effects of the project on peak hour traffic conditions and LOS. These scenarios included: 1) existing conditions, 2) existing conditions plus project traffic, 3) future 2030 traffic, and 4) future 2030 traffic plus the project traffic. The estimates of future traffic volumes were generated based on a review of past traffic growth, and extrapolating that growth out to 2030. ATE compared these projections with earlier forecast traffic growth prepared for the Santa Margarita Ranch development proposal (Fehr and Peers 2006), and found them to be more conservative (i.e., higher) than the earlier forecast.

Data and worksheets for the analyses are contained in the separate traffic technical appendix (Appendix C to this EIR).

4.11.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for Transportation and Circulation within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will:

- a. Increase vehicle trips to local or area-wide circulation system; and/or
- b. Reduce existing LOS on public roadway(s); and/or
- c. Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles); and/or
- d. Provide for adequate emergency access; and/or
- e. Result in inadequate parking capacity; and/or
- f. Result in inadequate internal traffic circulation; and/or
- g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.); and/or
- h. Result in a change in air traffic patterns that may result in substantial safety risks.

For the purpose of this EIR, the following criterion is used to determine the significance of project impacts to roadway structural conditions:

- i. Would increase the Traffic Index (TI) necessary to support heavy vehicle trips associated with the proposed project by more than 1.5 (existing TI = 10) on Highway 58 between the project site and Highway 101 (result in a substantial degradation of the roadway structural condition).

4.11.6 Project Impacts and Mitigation Measures

For discussion purposes, the above potential effects are organized into four groups or issue areas as follows:

1. **Traffic Volume Increases:** The initial study concluded on a preliminary basis that the first two of the above effects – both related to increases in traffic caused by the project – were potentially significant. The impact analysis of this potential effect uses the traffic “Level of Service” as the criteria for evaluating the roadway segments and intersections affected by the project.
2. **Traffic Safety:** Although the Initial Study concluded that the effects of the project on factors that may influence safety on the area roadways were less than significant, several of these issues were analyzed in response to comments raised during the scoping process or in agency meetings. These issues address item c. above.

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3. Access, Parking and Internal Traffic: This discussion addresses items d, e, and f from the Initial Study.
4. Cumulative Effects: For the future conditions, the analysis includes traffic generation from the approved Santa Margarita Ranch Agricultural Residential Cluster subdivision plus a forecast increase in highway traffic based on Caltrans data.

The remaining items from the Initial Study (g, dealing with plans for alternative transportation; and h, dealing with air traffic operations) were identified as not involving a significant impact. These issues do not apply to this project, and are not analyzed in this EIR.

Traffic Volume Increases

The project will contribute towards existing traffic that passes through the intersection of SR 58 (Estrada Avenue) and El Camino Real, and will increase the potential need for a signal at this intersection. This effect is considered a potential significant impact that can be mitigated.

The project will cause increases in traffic volumes on local roadways, but will not substantially reduce the Level of Service at intersections, freeway ramps, or on US Highway 101, when added to existing traffic volumes. The project traffic effects on other roadways and intersections are considered less than significant.

The project traffic generation is based on data from the application and from the review of the project performed during preparation of this EIR. Section 2.3.3 describes the review and adjustments made to the estimates of project trip generation. The distribution of this traffic over time was performed in the original traffic study and reviewed by ATE, and is summarized in Table 4.11-8 below using the updated traffic generation estimate.

**TABLE 4.11-8
REVISED PROJECT TRIP GENERATION**

Trip Type	Daily Trips ¹	A.M. Peak Hour			P.M. Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
Employees	10	5	0	5	0	5	5
Trucks	273	19	19	38	15	15	30
Total	283	24	19	43	15	20	35

¹ Daily trip ends (1-directional).

The directional distribution of traffic is shown in Figure 4.11-3. This distribution is based on a review of the future market areas and assumes that most of the project traffic (80 percent) will use the US Highway 101 corridor. The remaining 20 percent would be distributed to local market areas north on El Camino Real (10 percent), southeast on Pozo Road (5 percent), and northeast along SR 58 (five percent).

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El Camino Real/Estrada Avenue Intersection. This stop sign-controlled intersection is complicated by its angular geometry, the superelevation of El Camino Real to handle higher speed traffic, and by the presence of the Union Pacific Railroad tracks. A sign on Estrada Avenue indicates that there is only 50 feet between the tracks and the highway; but the actual distance between the tracks and the line at the stop sign is about 75 feet. This distance is sufficient for trucks to stop between the tracks and El Camino Real without extending into the latter. This distance is not sufficient, however, to avoid meeting traffic Signal Warrant 9 for intersections adjacent to railroad crossings. In any event, Mitigation Measure TRAFFIC-1a requires funding by the project towards improvements at the intersection of El Camino Real and Estrada Avenue, adjacent to the railroad crossing. It is anticipated that the design of this future intersection will meet the appropriate safety requirements specified by Caltrans District 5, County Public Works and the Public Utilities Commission (State agency responsible for rail safety). The addition of any additional traffic from the project, regardless of the LOS effects, will also meet the appropriate Signal Warrant. Meeting the Signal Warrant does not automatically mean that a traffic signal is necessary or desirable from a traffic operations viewpoint (that determination must be made by Caltrans). In their comment letter dated June 27, 2013, the California Public Utilities Commission also points out that the roadways and intersection at this location do not include lane striping through the intersection or raised medians, which would help to guide vehicle and bicycle traffic and reduce the potential for gate drive-around accidents. Because the quarry project will contribute traffic to this intersection, if and when Caltrans and the Department of Public Works determine that a signal is necessary based on LOS or other indicators this project should also contribute a proportional share towards the cost of the signalization. Intersection improvements would involve work in the railroad right-of-way, so they would also require review and approval by the California Public Utilities Commission.

Intersections and SR 58 through Santa Margarita. The resulting peak hour traffic due to the project at each intersection is shown in Figure 4.11-3, and the sum of existing plus project traffic is shown in Figure 4.11-4. Table 4.11-9 below shows the resulting peak hour traffic

**TABLE 4.11-9
EXISTING + PROJECT LEVELS OF SERVICE**

	Existing Delay/LOS		Existing + Project Delay/LOS	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Estrada Ave/El Camino Real				
WB Left + Thru	4.1 Sec./LOS A	3.8 Sec./LOS A	4.2 Sec./LOS A	3.9 Sec./LOS A
NB Approach	19.7 Sec./LOS C	12.7 Sec./LOS B	22.2 Sec./LOS C	13.4 Sec./LOS B
Estrada Ave/H St				
EB Approach	15.2 Sec./LOS C	11.0 Sec./LOS B	15.9 Sec./LOS C	11.2 Sec./LOS B
WB Approach	12.5 Sec./LOS B	10.2 Sec./LOS B	12.9 Sec./LOS B	10.3 Sec./LOS B

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NB Approach	0.3 Sec./LOS A	0.6 Sec./LOS A	0.3 Sec./LOS A	0.5 Sec./LOS A
SB Approach	6.1 Sec./LOS A	0.9 Sec./LOS A	5.6 Sec./LOS A	0.9 Sec./LOS A
W Pozo Rd/Calf Canyon Hwy				
EB Left + Thru	4.6 Sec./LOS A	6.2 Sec./LOS A	5.7 Sec./LOS A	6.7 Sec./LOS A
SB Approach	9.3 Sec./LOS A	9.3 Sec./LOS A	9.4 Sec./LOS A	10.1 Sec./LOS B
Calf Canyon Hwy/Project Driveway				
EB Left + Thru	NA	NA	3.0 Sec./LOS A	0.9 Sec./LOS A
SB Approach	NA	NA	9.2 Sec./LOS A	8.7 Sec./LOS A

delays and LOS results. The data for the Existing Conditions from Table 4.11-5 above has been repeated here for easy comparison. These comparisons show that the effect of the project generated traffic is not substantial, and that the LOS for all movements at all intersections will remain within the accepted Caltrans threshold for this portion of SR 58 (peak hour LOS E) and within the San Luis Obispo County standard (peak hour LOS C). This effect of the project when added to existing traffic volumes is, therefore, a less than significant impact.

For the SR 58 segment between Estrada Avenue and U.S. 101, the Project would add up about 11 inbound trucks and 11 outbound trucks per hour on average, and about 35 truck trips per the peak hour as shown in Figure 4.11-3. The total peak hour trip generation is 38 truck trips per hour as shown in Table 4.11-8, but a small number of these are expected to be to and from the north, and will not affect the SR 58 segment under discussion here. This segment is relatively flat and straight with standard travel lanes and paved shoulders within a wide right-of-way. Caltrans count data shows that this segment carries about 7,200 daily trips. The Project's addition of 273 daily trips (see Section 2.3.3 in the Project Description) or the 38 peak hour truck trips noted above, would not significantly impact traffic operation on this segment of SR 58 between Estrada Avenue and U.S. Highway 101.

While less than significant from a traffic perspective, this truck traffic would add to existing noise levels – an impact that is identified in Section 4.8 under Impact NOISE-1 and NOISE-5. The truck traffic and its attendant noise level also contributes towards the potential incompatibility with land use in the Santa Margarita village area, which is discussed in Section 4.14.

US Highway 101/SR 58 Interchange. The project traffic distribution discussed above assumes 80 percent of the quarry traffic will use US Highway 101. To assess the effect of this traffic on the ramp and highway operations, ATE first assumed that all of this traffic would move to and from the south. Table 4.11-11 below shows the results of this analysis, compared with the existing conditions. Examination of the table indicates that the project would cause small changes in the traffic density, but in no case would there be a change in the resulting peak hour LOS. In all cases, the peak hour LOS would be D or better., which is

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consistent with the target established by Caltrans for US Highway 101 operations. ATE performed a similar analysis, but assuming that all of the project traffic to US highway would travel to and from the north instead. The results of this analysis are similar to the all-southbound assumption, so they are not repeated here but they are included in Appendix C. The effects of the project on the SR 58 ramps mainline operations of US Highway 101 are less than a significant impact, because the LOS would not be altered by the project-generated traffic.

Impacts to SR 58 resulting from increased heavy truck traffic (deterioration of roadway structural condition). The project will increase heavy truck traffic volumes along the proposed project's identified haul routes, including SR 58 between the project site and Highway 101. The Traffic Index (TI) is a logarithmic scale, which indicates the ability of the pavement structure to support repetitive wheel and axle-loads of large trucks. The total projected Equivalent Single Axle Load (ESAL) during the pavement design life is in turn converted into a Traffic Index (TI) that is used to determine minimum pavement thickness. TI calculations were prepared by URS, following Caltrans procedures outlined in the Highway Design Manual Chapter 610, Topic 613.3 to determine impacts resulting from project related trucks on SR 58. A 20-year pavement design life was used to calculate the TI associated with the proposed project's increase in heavy vehicles along with an existing TI for this entire stretch of SR 58 of 10.0 (based on Caltrans information contained in their November 21, 2013 letter).

The County of San Luis Obispo has established significance criteria associated with potential public roadway damage along SR 58 between the project site and Highway 101. Impacts to the roadway of SR 58 would be considered a significant impact if the project related heavy vehicle traffic increases the calculated Traffic Index by 1.5 or more from the existing roadway design (existing TI = 10). A change in the Traffic Index of 1.5 or more would represent a substantial shortening of the design life of SR 58 (deterioration of roadway condition) as a result of implementing the proposed project. To ensure that the structural integrity of the State highway system would not be adversely affected by the proposed project, this EIR provides County decision makers and other readers of this document with information about the effect of the increased volume of heavy trucks on SR 58 generated by the project.

Typically, TI ratings in the range of 7.0 +/- are calculated for roadways that are not expected to carry appreciable amounts of truck traffic. Higher TI values in the range of 9.0 to 10.0 are typical of major arterial roadways with heavy truck traffic, and values of 10.0 or more are common for freeways and freeway ramp systems. The effects on pavement life from passenger cars, pickups, and two-axle, four-wheel trucks are considered to be negligible. A summary of TI calculation for SR 58 are presented in Table 4.11-10. State highways, such as SR 58, generally are designed to handle a mix of vehicle types, including heavy trucks.

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TABLE 4.11-10
SUMMARY OF TRAFFIC INDEX CALCULATIONS

<u>Segment #</u>	<u>Current ADT</u>	<u>Current AADTT</u>	<u>Project AADTT</u>	<u>Total AADTT</u>	<u>Existing T.I. Per Caltrans</u>	<u>T.I.(with Quarry)</u>	<u>T.I. (No Quarry)</u>	<u>T.I. Difference (T.I. with Quarry – Existing T.I. Per Caltrans)</u>
<u>1</u>	<u>7200</u>	<u>447</u>	<u>218</u>	<u>668</u>	<u>10</u>	<u>11</u>	<u>10</u>	<u>1</u>
<u>2</u>	<u>2900</u>	<u>180</u>	<u>246</u>	<u>426</u>	<u>10</u>	<u>10.5</u>	<u>9</u>	<u>0.5</u>
<u>3</u>	<u>1776</u>	<u>111</u>	<u>260</u>	<u>371</u>	<u>10</u>	<u>10.5</u>	<u>8.5</u>	<u>0.5</u>

ADT – Average Daily Traffic

AADT – Average Annual Daily Truck Traffic (6.2& of ADT per Caltrans 2010 Data)

Based on the information contained in Table 4.11-10, the truck trips generated by the project would cause incremental damage and wear to roadway pavement surfaces along SR 58 because the calculated TI (with Quarry) would not exceed the existing design TI along any of the three segments of SR 58 by more than 1.5. The degree to which this wear and tear would occur depends on the roadway’s design (pavement type and thickness) and its current condition. Information provided by Caltrans for SR 58 indicates that existing TI values are 10.0 for all three segments of SR 58 between the project site and Highway 101 (see Exhibit B to Appendix G). Table 4.11-10 indicates the project would increase the TI necessary to support heavy trucks associated with the proposed project for all three segments of the haul route along SR 58, but by no more than 1.0 for any individual segment. Project generated heavy trucks (based on the maximum production quantities described in the EIR) will increase heavy truck traffic along SR 58 such that a TI design standard of 11.0 would be required to handle the higher volume of heavy truck traffic without deteriorating the pavement surface (decrease in the design life of the highway) for segment #1. Segment #2 and #3 would require a TI of 10.5 to ensure the maximum production quantities associated with the proposed quarry would not decrease the design life of the highway. Based on the significance criteria established for this EIR, the project would have a less than significant impact to the roadway condition of SR 58. While the project would not result in a significant impact, it will contribute to the degradation of SR 58 due to the increase in heavy truck traffic (refer to cumulative impact discussion below).

Bicycle Level of Service (BLOS) SR 58. As discussed above, bike lanes are present along various segments of the identified truck routes (but not all segments) associated with the proposed project. The Highway Capacity Manual describes a method for measuring a level of service to bicycles that use state highways. Bicycle level of service for two-lane highway segments are based on a “Bicycle Level of Service” (BLOS) score, which is in turn based on a travel perception model. This score is based, in order of importance, on five variables:

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- Average effective width of the outside through lane,
- Motorized vehicle volumes,
- Motorized vehicle speed,
- Heavy vehicle (truck) volumes, and
- Pavement condition.

The BLOS score represents a perception that would likely be held by bicyclists along a given segment of a roadway regarding their experience cycling on the roadway. Changes to the input levels of any one of the above mentioned variables can result in a skewed perception of BLOS.

Caltrans has provided information related to Bicycle Level of Service (BLOS) dated November 21, 2013 and included in Appendix G. The BLOS analysis performed by Caltrans indicates that the existing BLOS along SR 58 (under existing conditions) is “F” (BLOS score of 8.79). The primary contributing factors associated with Caltrans’s calculated LOS “F” for this stretch of SR 58 are related to the existing and proposed percentage of heavy vehicles along this stretch of SR 58. When the proposed project is added to the existing conditions, the Bicycle Level of Service remains “F” (BLOS score of 14.14).

Review of the Highway Capacity Manual indicates that the BLOS model should not be used over large stretches of roadways with varied grades and / or traffic conditions. The Highway Capacity Manual indicates that the resulting score generally ranges from 0.5 to 6.5 and is stratified to produce a LOS A-F result. As noted above, Caltrans calculated the existing score as 8.79 (without project) and 14.14 (with project) which is well outside of the anticipated range of BLOS scores identified in the Highway Capacity Manual. The analysis provided by Caltrans resulted in scores that were so extreme that mitigation recommended by Caltrans (in the form of shoulder widening) does not mitigate either the BLOS existing or project scores.

Discussions with industry professionals indicate that the model used in determining the BLOS was developed for roads with very low heavy vehicle traffic (between 0 and 2 percent) and the formula does not accurately reflect BLOS on road segments with higher levels of heavy vehicle traffic. The Highway Capacity Manual (2010) states: “*The bicycle methodology was developed with data collected on urban and suburban streets, including facilities that would be defined as suburban two-lane highways. Although the methodology has been successfully applied to rural two-lane highways in different parts of the United States, users should be aware that conditions on many rural two-lane highways will be outside the range of values used to develop the bicycle LOS model. The range of values used in the development of the bicycle LOS model are shown below:*

- *Width of the outside through lane: 10 to 16 ft;*
- *Shoulder width: 0 to 6 ft;*
- *Motorized vehicle volumes: up to 36,000 annual average daily traffic (AADT);*

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- Posted speed: 45 to 50 mi/h;
- Heavy vehicle percentage: 0% to 2%; and
- Pavement condition: 1 to 5 on the Federal Highway Administration (FHWA) 5-point pavement rating scale.

The bicycle LOS methodology also does not take differences in prevalent driver behavior into consideration, although driver behavior may vary considerably both regionally and by facility. In particular, the likelihood of drivers slowing down or providing additional horizontal clearance while passing cyclist plays a significant role in the perceived quality of service of a facility.”

Based on the information provided by Caltrans, the information contained in the Highway Capacity Manual, and discussions with industry professionals; the County has determined that “Bicycle Level of Service” more appropriately describes the bicyclist’s perception of the recreational experience they would perceive along a segment of roadway; accordingly, this topic is discussed further in Section 4.10 – Recreation.

In summary, the direct effect of the project on the potential need for a traffic signal at SR 58/El Camino Real and Estrada Avenue is considered a potentially significant impact, which can be mitigated. The direct effects of the proposed quarry project increase in traffic as measured by intersection delays and traffic density on US Highway 101 and the SR 58 freeway ramps are less than significant. The direct effect resulting from project generated heavy trucks operating along the haul route (SR 58) is a potentially significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT TRAFFIC-1a: Increase Traffic at El Camino Real/SR 58 and Estrada Avenue. The project will contribute additional traffic to this intersection adjacent to the UPRR rail crossing, where a potential need for signalization already exists. Potentially unsafe traffic conditions may be created at this location.	MM TRAFFIC-1a: Increase Traffic at El Camino Real/SR 58 and Estrada Avenue. Prior to the issuance of a Notice to Proceed, the applicant/quarry operator shall provide payment or a suitable financial guarantee to fund a portion of the cost of signalization and related intersection improvements at Estrada Avenue (SR 58) and El Camino Real. The amount is to be determined by the County Department of Public Works based on the proportion of total peak hour traffic through the intersection that is assignable to this project, using methods consistent with Caltrans guidelines. The timing for this requirement may be extended by the County into a later phase of the quarry project in the event Caltrans and the Department of Public Works determine that postponement of signalization of this intersection is appropriate. <u>Any signal or other improvements at this intersection must meet Caltrans signal warrants</u>	Less than significant

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Description of Impact	Mitigation Measure	Residual Impact
	<u>and design standards.</u>	
IMPACT TRAFFIC-1b: Traffic Volume Increases – LOS. The project will cause small increases in the traffic delay at intersections in the project vicinity, and on the traffic density on US Highway 101 and the SR 58 freeway ramps. In all cases, these changes will not alter the existing Level of Service (LOS) and in all cases the existing LOS is within applicable standards.	MM TRAFFIC-1b: Traffic Volume Increases – LOS. Since this effect is less than significant, no mitigation is required.	Less than significant

**TABLE 4.11-11
EXISTING + PROJECT LEVELS OF SERVICE – US HIGHWAY 101/SR 58
(ALL TRIPS TO/FROM THE SOUTH)**

Mainline or Ramp	Time Period	Lanes	Existing Operations		Existing + Project Operations	
			Density	LOS	Density	LOS
Mainline US 101 northbound n/o SR 58	A.M. Peak	2	9.1	LOS A	9.1	LOS A
	P.M. Peak		24.1	LOS C	24.1	LOS C
Mainline US 101 northbound s/o SR 58	A.M. Peak	2	9.0	LOS A	9.2	LOS A
	P.M. Peak		26.8	LOS D	27.0	LOS D
Mainline US 101 southbound n/o SR 58	A.M. Peak	2	21.0	LOS C	21.0	LOS C
	P.M. Peak		11.4	LOS B	11.4	LOS B
Mainline US 101 southbound s/o SR 58	A.M. Peak	2	23.7	LOS C	23.9	LOS C
	P.M. Peak		11.7	LOS B	11.8	LOS B
Ramp: SR 58 northbound on-ramp	A.M. Peak	1	14.2	LOS B	14.2	LOS B
	P.M. Peak		29.7	LOS D	29.7	LOS D
Ramp: SR 58 northbound off-ramp	A.M. Peak	1	15.1	LOS B	15.1	LOS B
	P.M. Peak		34.8	LOS D	34.8	LOS D
Ramp: SR 58 southbound on-ramp	A.M. Peak	1	29.2	LOS D	29.4	LOS D
	P.M. Peak		16.9	LOS B	17.1	LOS B
Ramp: SR 58 southbound off-ramp	A.M. Peak	1	29.3	LOS D	29.3	LOS D
	P.M. Peak		18.0	LOS B	18.0	LOS B

Traffic and Pedestrian Safety

The project will generate heavy truck traffic during the morning and afternoon, which could interfere with traffic and pedestrian activity at the Santa Margarita Elementary School. This

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is considered a potential significant impact that can be avoided with appropriate scheduling of truck activity associated with the project.

This issue involves traffic at the school crossing on Estrada Avenue (SR 58) at H Street and the nearby intersection at El Camino Real, and possible interference by truck traffic with pedestrians crossing El Camino Real/SR 58 in Santa Margarita. Vehicle movement in and out of the park and ride or interference with traffic trying to merge onto US Highway 101, and the movement of traffic through the 90-degree turn on SR 58 at H Street are also addressed here, but the project effects at these locations will be less than significant.

School Crossing. There is a crest vertical curve on Estrada Avenue (SR 58) south of H Street, which is the location of the Santa Margarita Elementary School crossing. This crest obscures driver views from the south of the school pedestrian crossing. This effect does not occur with heavy truck drivers, however, since their driving position is much higher above the street surface than that of automobile drivers. Truck drivers can see the crossing from about 350 feet away.

The crossing is striped and marked with signage in accordance with applicable Caltrans standards (Traffic Manual, Chapter 10, School Area Pedestrian Safety Caltrans 1996), and includes other safety features. School zone speed limits are posted and enforced in the area, and a driver feedback sign has been installed for northbound traffic. Caltrans and the County recently installed a manually-operated flashing beacon light on either side of the crosswalk. The crossing is monitored by school crossing guards during drop-off and pick-up times.

Although trucks and truck drivers may not directly affect the safety of the school crossing, the presence of additional truck traffic might interfere with pedestrian views and the ability of crossing guards to see and take note of oncoming traffic. This potential interference with visibility at the school crossing is considered a less than significant impact, since the crossing is on a state highway and is consistent with the applicable Caltrans guidelines and standards. The truck traffic at this location would contribute to the potential land use incompatibility of the project relative to the Santa Margarita community. This topic is discussed further in Section 4.14. Several Applicant Proposed Measures, which are intended to minimize the potential incompatibility, are presented in that section.

Pedestrian Crossing of El Camino Real/SR 58. The project will contribute approximately 35 peak hour truck trips through the downtown portion of Santa Margarita, and will contribute towards potential conflicts with pedestrian movements across El Camino Real at Encina Avenue. This is considered a potential significant impact, which can be offset by contributing towards improvements that will help to achieve the improvements envisioned for pedestrian safety in the Santa Margarita Design Plan.

Park and Ride. The counts and gap analysis performed by ATE on SR 58 adjacent to the park and ride lot indicate that there are no significant operational problems, sight distance

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obstructions, or abnormal accident history at this location. The addition of up to 35 trucks during peak hour conditions is not expected to cause any operational or excessive safety problems at this location, particularly since there will be sufficient gaps available between the truck trips for cars to make turning movements.

US Highway 101 and SR 58 Ramps. The speed surveys by ATE indicated that heavy trucks entering US Highway 101 southbound from SR 58 had an average speed of 51.1 MPH, compared with a speed of 59.1 MPH for automobiles. The field observation and speeds survey found that large trucks merging onto the freeway do not significantly affect mainline operations. These results are consistent with the operational analysis performed using the Highway Capacity Manual, demonstrating that this southbound ramp junction operates at a peak hour LOS D, which is consistent with the Caltrans target LOS for US Highway 101.

SR 58 Curve on J Street. The issue of truck traffic from the proposed Oster/Las Pilitas Quarry, and its potential effect on the SR 58 and other roadways, was considered by reviewing agencies during the scoping period for this EIR and during preparation of the EIR itself. Although residents and others have raised a concern about the safe operation of trucks through the 90-degree curve, for several reasons the quarry related truck traffic represents a less than significant effect relative to traffic operations at this curve location. These reasons are as follows:

- The radius of curvature for the roadway at this location is adequate to accommodate large trucks within the travelled lanes, with possible use of the paved shoulder by some trucks, without “offtracking” outside of the travelled lanes (see Figure 4.11-5).
- The truck traffic volume from the proposed quarry would contribute approximately 38 peak hour truck trips.
- Truck traffic is generally slower than the passenger vehicles from residential uses.
- Truck drivers have an elevated driving position providing better forward vision when compared to most passenger vehicles.

For these reasons, the effect of the project related truck traffic on the safe highway operations at the 90-degree curve are considered less than a significant impact.

In summary, the additional heavy truck traffic in the vicinity of the Santa Margarita Elementary school may affect visibility of oncoming cars from the school crossing, and in this regard may be considered incompatible with the land uses in the Santa Margarita community, but it is not considered a significant impact. A separate Applicant Proposed Measure addressing this issue is also discussed in Section 4.14, Land Use (APM LU-1A).

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The potential effects of the project related truck traffic on the pedestrian crossing at Encina Avenue in downtown Santa Margarita is considered potentially significant, and mitigable through improvements that will increase pedestrian safety.

The project effects on the safety of roadways, intersections, the park and ride facility, the freeway ramps associated with US Highway 101, and other locations are not expected to be significant.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT TRAFFIC-2a: Elementary School Crossing. Project generated heavy truck traffic may impair visibility of roadway traffic from the Santa Margarita Elementary school crossing on Estrada Avenue at H Street. Since the crossing design and improvements on this state highway are consistent with applicable standards, this effect is a less than significant impact.	MM TRAFFIC-2a: Elementary School Crossing. Since this effect is less than significant, no mitigation is required. NOTE: Applicant Proposed Measure APM LU-1A addresses this item as a land use compatibility issue.	Less than significant
IMPACT TRAFFIC-2b: Pedestrian Crossing at Encina Avenue. The project will increase traffic, and contribute towards pedestrian safety conflicts, at this crossing of El Camino Real in downtown Santa Margarita.	MM TRAFFIC-2b: Pedestrian Crossing at Encina Avenue. Prior to issuance of a Notice to Proceed with quarry operations, the applicant/quarry operator shall construct a pedestrian refuge island on SR 58 at the intersection of Encina Avenue, or related pedestrian safety improvement consistent with the Santa Margarita Design Plan, as approved by the County Department of Public Works and Caltrans. <u>This improvement will require a Caltrans encroachment permit and compliance with applicable Caltrans design standards.</u>	Less than significant

Access, Parking, and Internal Traffic

No operational impacts related to access and on-site parking and traffic are anticipated. The potential for off-site truck parking may represent a significant impact but this can be minimized through operational conditions on the quarry.

Under normal operations, no more than a few trucks are expected at the quarry site at any one time. Intersection analysis indicates that under both existing and future conditions, the proposed driveway access on SR 58 will function adequately ~~without additional highway widening, dedicated turn lanes, or other improvements.~~ but Caltrans has indicated that a left turn lane on SR 58 is needed to ensure safe access to the proposed project site (in correspondence received on the Draft EIR dated May 24, 2013 as well as a follow up memo dated September 5, 2014. The specific design location of the driveway intersection with SR 58 is considered adequate, but final design has not yet been approved by Caltrans. Also, since the driveway will connect to the state highway and involve construction within the right-of-

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way, an Encroachment Permit will have to be approved by Caltrans. The review and approval of the Encroachment Permit by Caltrans will address appropriate traffic control and safety during construction, and ensure that the improvements are consistent with Caltrans standards.

Emergency service in the area is provided by Cal Fire from the Parkhill Road station, which is about 1.5 miles east of the project site. The proposed access drive would provide a paved road with two 12-foot travel lanes suitable for use by emergency vehicles if necessary. It would not alter or interfere with access to the existing residences and ranch structures elsewhere on the property. Thus, the project effects relative to emergency access would not be significant.

Specific construction projects or contracts may require larger volumes of aggregate material in shorter times, and these occurrences may lead to a larger number of trucks at the site simultaneously. The particular concern in this regard is the queuing or parking of trucks in nearby areas prior to the quarry opening in the mornings, or if sufficient parking is not available on-site. In addition to designated employee parking, the project design shows sufficient flat area in the vicinity of the scale house and office for parking six large aggregate trucks, without interfering with the loop road through the processing and stockpile area where trucks would be loaded. If trucks were also to be lined up on the paved access road, another 20 trucks could be accommodated. Thus, the issue related to off-site parking would be associated with early morning truck arrivals prior to the quarry opening. Potential disturbances to residential neighborhoods from off-site truck parking could occur if trucks arrive before the quarry opens, but it can be minimized through appropriate scheduling and operational controls at the quarry. The quarry operator can identify suitable off-site parking areas, or exclusion areas where parking of heavy trucks should not occur, and provide this information to all truck drivers dealing with the quarry. Such a procedure should also include publicizing the information to the community and providing communication points to receive complaints in response to illegal truck parking.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT TRAFFIC-3a: Access. The proposed access drive will require construction within the SR 58 right-of-way causing temporary disruption of highway traffic, and long term adverse effects on traffic using the state highway.	MM TRAFFIC-3a: Access. Prior to the issuance of any construction permit by the County for the project access road, the applicant/quarry operator shall obtain an Encroachment Permit from Caltrans, and shall incorporate any conditions from Caltrans related to traffic controls or construction of the access road into its design, <u>including a left turn lane from SR 58 at the project entrance. These conditions may include sight distance and other design features consistent with the Highway Design Manual, and compliance with subsequent Caltrans environmental review, if necessary, and other Encroachment Permit procedures.</u>	Less than significant
IMPACT TRAFFIC-3b: Internal Traffic and Parking. Early morning parking by trucks waiting for the	MM TRAFFIC-3b: Internal Traffic and Parking. The applicant/quarry operator shall designate and publicize to customers and haulers, off-site limits within which trucks should	Less than significant

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Description of Impact	Mitigation Measure	Residual Impact
quarry to open could disturb and adversely affect residential areas.	<p>not operate or park while awaiting for the quarry gates to open in the morning. Prior to issuance of the Notice to Proceed for any off-site sale and transport of aggregate material, the applicant/quarry operator shall provide the Department of Planning and Building with documentation identifying these off-site limits and how they will be communicated to truck operators and to residents in the community. The documentation shall also identify by name and telephone number, where complaints may be made regarding unacceptable truck parking.</p> <p>NOTE: If Applicant Proposed Measure APM LU-1 is adopted, then MM-TRAFFIC-3b would be incorporated into the Traffic Control Management Plan.</p>	

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to preserve mineral resources and protect mineral extraction, it is reasonable to expect that future quarries which would utilize SR 58 for access to the quarry will be approved and constructed in this area.

Future traffic increases in the area will cause degraded LOS at the intersection of Estrada Avenue and El Camino Real, and the project will contribute towards this impact. This is considered a potential significant impact that can be avoided with appropriate planning and implementation of traffic improvements by the County and Caltrans. The contribution of the project towards the cumulative impact will be mitigated through a proportionate funding of the costs of the improvements as required in Mitigation Measure TRAFFIC-1a above.

Similarly, future heavy truck traffic in the area, as well as the project’s increase in heavy trucks along SR 58, would result in more rapid deterioration of the roadway surface along the proposed haul route. The contribution of the project’s heavy truck traffic to existing heavy truck traffic and future heavy trucks along this route is considered a potentially significant impact that can be mitigated through implementation of mitigation measure Traffic-4b below. The intent of this measure is to ensure on-going maintenance of SR 58 along the proposed haul route such that the highway does not experience major degradation beyond the existing condition of the highway without the project.

Implementation of this measure will include review of required project improvements / repairs along SR 58 under Caltrans “Complete Streets Program” (most recent version is presented in Appendix G; updates may occur from time to time) prior to construction. The

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California Complete Streets Act of 2008 (AB 1358) states: “In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit.” Facilities may look different depending on the context and appropriate facilities in a rural community may be different from a dense urban area. This review will include an analysis to determine the appropriateness of providing shoulders, restriping and/or other improvements to ensure all travelers (including bicyclists) can be accommodated on the State highway system.

The issue of cumulative traffic effects is related to the overall growth in the Santa Margarita community, southern Atascadero, and the unincorporated neighborhoods in between. Regional growth in other areas may also contribute towards increases in traffic on SR 58 through Santa Margarita, but the peak hour conditions that define traffic impacts will be related more to local and nearby development. There are also other aggregate mines in the region similar to the proposed quarry. The overall production rate for aggregate material, however, and the generation of truck traffic to deliver it, is a function of the market for the material not the production capacity. Background information and a discussion demonstrating this market-driven relationship is provided in a memorandum by Sespe Consulting, Inc., dated October 28, 2011, and included as part of “Appendix B: Setting,” which is in their larger Air Quality and Climate Change Impact Assessment contained in Appendix D of this EIR. Because of this strong market influence on the regional rate of aggregate production, the proposed project truck traffic will not completely add on to existing aggregate truck traffic in the region – it will displace at least some of it. The overall percentage of heavy truck traffic on SR 58 and area roadways is expected to remain in the existing three percent range.

Of the 21 future development projects anticipated in the region (see Section 5.3), Santa Margarita Ranch (Project ID# 16) is clearly the most notable – both in terms of its potential traffic effects within the community and because it is the only large private development that would be expected to contribute substantial funding towards major traffic improvements on area roads. The two major land development projects underway in the southern portion of the City of Atascadero [Dove Creek (Project ID# 20)] and Las Lomas/Woodridge Specific Plan [Project ID# 21] will construct an additional 350 to 400 dwelling units in the next 5 to 10 years. These projects, however, will generate little southbound peak hour traffic through Santa Margarita since they both have more direct access to US Highway 101 via Santa Barbara Road (only local deliveries from the proposed project will use Santa Barbara Road). Development of the Eagle Ranch Specific Plan area [Project ID# 1] in southwestern Atascadero may start within that timeframe, but would not likely be completed for another 10 to 20 years. In any event, that project will affect US Highway 101, but would have little or no traffic effects on SR 58 since its access to and from US Highway 101 is farther north.

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To assess the effects of the project on future traffic volumes and operations, traffic conditions for the year 2030 were projected and then the project-generated traffic was added to those volumes to determine the relative significance of the project contribution towards overall traffic volumes. The 2030 projection includes a combination of current traffic, traffic from the Santa Margarita Ranch Agricultural Residential Cluster Subdivision (112 residential units), and general projections of future traffic based on an annual growth rate derived from Caltrans traffic data. Although not explicitly identified in the projection, the Hanson Santa Margarita Quarry is included since it is already operating and its truck traffic is part of the current baseline conditions. Future expansion of the Hanson Quarry is anticipated, but the daily operations rate and truck traffic generation are not expected to change significantly.

Figures 4.11-6 and 4.11-7 show the projected 2030 traffic volumes, with and without traffic from the proposed project. Table 4.11-12 below shows the projected intersection delay times and LOS for the year 2030 peak hour conditions without and with the proposed project.

The results above show that under the 2030 conditions without the project, two of the intersections in the area are expected to operate at a LOS that does not meet the San Luis Obispo County LOS C standard, with or without the proposed quarry project. These intersections are:

- Estrada Avenue at El Camino Real (both A.M. and P.M. peak hour)
- Estrada Avenue at H Street (A.M. peak hour)

Both of these intersections are along the portion of SR 58 where the Caltrans route concept LOS is E.

**TABLE 4.11-12
2030 NO PROJECT AND 2030 + PROJECT LEVELS OF SERVICE**

Intersection	2030 No Project Delay/LOS		2030 + Project Delay/LOS	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Estrada Ave/El Camino Real				
WB Left + Thru	4.7 Sec./LOS A	5.08 Sec./LOS A	4.8 Sec./LOS A	5.1 Sec./LOS A
NB Approach	255.7 Sec./LOS F	31.6 Sec./LOS D	302.1 Sec./LOS F	38.2 Sec./LOS E
Estrada Ave/H St				
EB Approach	30.2 Sec./LOS D	14.4 Sec./LOS B	32.7 Sec./LOS D	14.8 Sec./LOS B
WB Approach	24.7 Sec./LOS C	12.9 Sec./LOS B	26.9 Sec./LOS D	13.2 Sec./LOS B
NB Approach	0.3 Sec./LOS A	0.6 Sec./LOS A	0.3 Sec./LOS A	0.6 Sec./LOS A
SB Approach	6.8 Sec./LOS A	0.9 Sec./LOS A	6.6 Sec./LOS A	0.9 Sec./LOS A
W Pozo Rd/Calf Canyon Hwy				
EB Left + Thru	4.9 Sec./LOS A	8.1 Sec./LOS A	5.8 Sec./LOS A	8.8 Sec./LOS A

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SB Approach	10.0 Sec./LOS B	12.3 Sec./LOS B	10.3 Sec./LOS B	15.0 Sec./LOS B
Calf Canyon Hwy/Proj. Driveway				
EB Left + Thru	NA	NA	2.3 Sec./LOS A	0.6 Sec./LOS A
SB Approach	NA	NA	9.7 Sec./LOS A	8.9 Sec./LOS A

As discussed above in Impact TRAFFIC-1a, the intersection of Estrada Avenue at El Camino Real currently meets Signal Warrant 9 due to the proximity of the railroad crossing. Mitigation measure TRAFFIC-1a requires a contribution towards funding the signalization of this intersection, but it is recognized that the timing for signalization would be established by the County Department of Public Works and Caltrans. Based on the TPG traffic analysis, signalization of the Estrada Avenue/El Camino Real intersection does not include widening the existing paved sections to accommodate additional lanes or shoulders; the existing lanes and turning movements could be retained. The Signal Warrant analysis by ATE confirms this conclusion, and indicates that installation of traffic signals would provide LOS B during the A.M. peak period and LOS A during the P.M. peak period for the 2030 plus project scenario. These discussions are also consistent with the analysis and mitigation recommendations for this intersection in the Santa Margarita Ranch EIR (San Luis Obispo County June 2008: page 4.12-24).

The common feature in the analyses summarized in the above paragraph is that the traffic volumes and calculated delays do not indicate the need for a dedicated left-turn lane from El Camino Real onto Estrada Avenue (SR 58), or a dedicated right turn lane from SR 58 onto Estrada Avenue. There are, however, other factors that complicate the design of the intersection at this location. These factors include the crest on Estrada Avenue (superelevation on El Camino Real) that allows southbound El Camino Real traffic to maintain speed as the road joins SR 58 entering Santa Margarita from the east. The Salinas River Area Plan and Santa Margarita Design Plan both indicate a bicycle lane along eastbound El Camino Real through downtown Santa Margarita and turning right onto Estrada Avenue to continue on SR 58. The Santa Margarita Design Plan also indicates a left turn lane on El Camino Real at locations “outside downtown” (San Luis Obispo County October 2001: page II-9). The Union Pacific Railroad tracks cross Estrada Avenue just east of this intersection, and must be considered in any improvements planned for this location. Alteration of improvements that cross the railroad right-of-way must be reviewed and approved by the Public Utilities Commission. Caltrans is responsible for improvements within its right-of-way, and must either undertake or approve any changes to be made with this intersection.

With respect to the Estrada Avenue/H Street intersection—the location of the pedestrian crossing for access to the Santa Margarita Elementary school—the analysis by ATE indicates that signalization at this intersection is not warranted under existing or 2030 conditions plus the project. The decreased levels of service on the H Street legs of this intersection in the

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2030 and 2030 plus project scenarios are limited to the relatively short portions of the morning peak hour when school drop-off traffic is occurring. Mitigation measure TRAFFIC-2a will ensure that the project does not contribute this effect, but the project may still contribute some traffic during morning and afternoon peak hours. In the event that a future evaluation by the County determines that construction of a signal at this intersection should occur, the quarry project should contribute towards its funding in proportion to the impact of its traffic.

On the right angle turn of SR 58 at J Street, although future traffic from the Santa Margarita Ranch Agricultural Residential Cluster Subdivision may cause a significant impact due to its contribution towards unsafe conditions at this location, the proposed quarry traffic will involve slower moving trucks. The project may not improve the situation at this turn, but it should not exacerbate it.

Mitigation for the cumulative traffic impact, mainly for addressing the peak hour volume at Estrada Avenue and El Camino Real, requires a combination of efforts from different agencies. The Salinas River Area Plan identifies the County Planning and Public Works Department and Caltrans as being responsible for completing the circulation program within Santa Margarita (San Luis Obispo County 2003:Table 5-1, page 5-16). Several potential funding sources are mentioned: the San Luis Obispo Council of Governments (SLOCOG), Caltrans, State Transportation Improvement Plan, Assessment District, and private funding. Specific funding from governmental agencies has not yet been identified. An assessment district or similar funding mechanism for improvements in the Santa Margarita community has not yet been formed. Private funding in this context means funding through conditions placed on land development projects.

The only substantial potential land development project in the vicinity that would affect the intersections in question is the Santa Margarita Ranch project. The initial Agricultural Residential Cluster Subdivision of 111 lots was approved in 2008 without a condition to improve the intersection of Estrada Avenue and El Camino Real. The status of the “Future Development Program” within Santa Margarita Ranch is not certain at this time since it was not approved in 2008. It was determined that the Santa Margarita Ranch project would contribute trips to locations within the community of Santa Margarita with existing deficiencies and the impact was significant and unmitigable. Remaining projects in and around the Santa Margarita community are generally limited to lot splits or parcel maps or similar small traffic generators, which are presented in a Table in Section 5.3. These small projects have not been required to identify and mitigate traffic impacts, or to contribute funding towards roadway or traffic improvements.

The proposed quarry project should be required to contribute funding towards the necessary intersection improvements in proportion to its effects on the intersection. That proportion has been estimated by ATE to be 8.1 percent based on the project contribution to the 2030 traffic

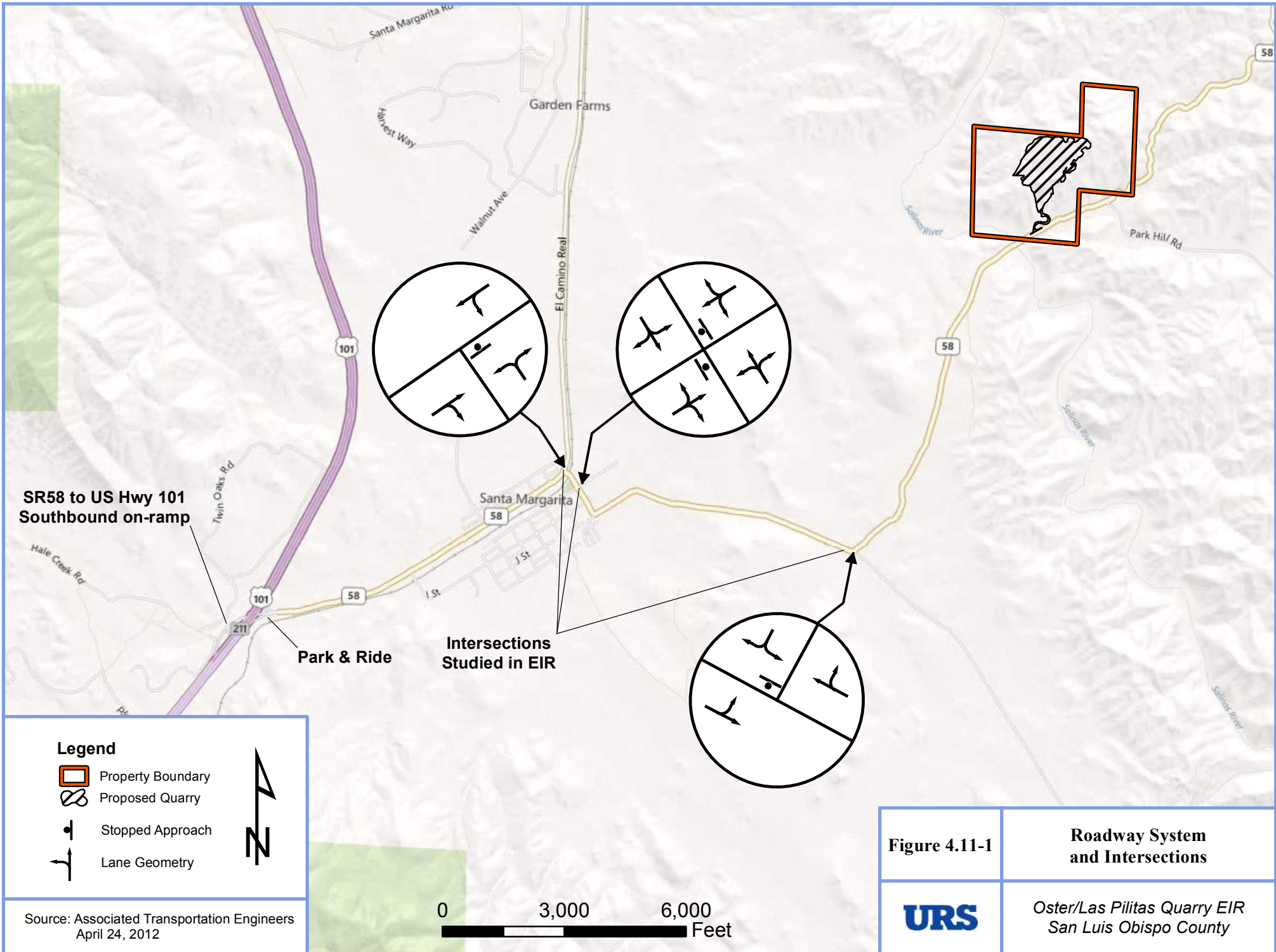
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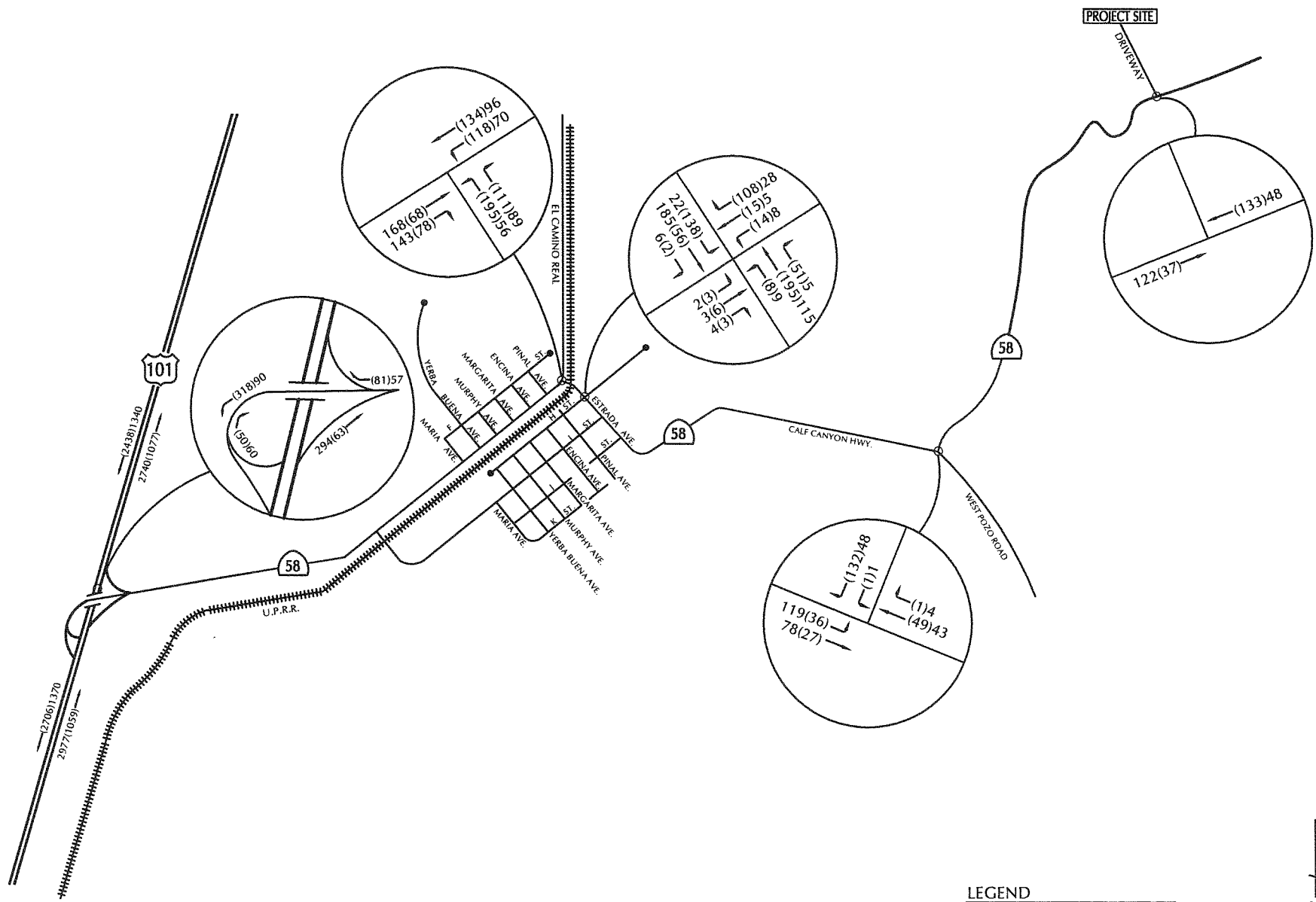
volume at Estrada Avenue and El Camino Real. If the traffic signal is deemed necessary before this time, then the proportionate contribution from the project would be higher. The dollar amount of this contribution, and the mechanism of its provision, must be determined by the County Public Works Department. The anticipated impact will not occur until future traffic volumes lead to degradation in the level of service or other conditions that lead the County Department of Public Works and Caltrans to decide that signalization is needed. Since these conditions may not develop for a number of years, it is appropriate to link this mitigation requirement to subsequent phases of the quarry. The situation is similar for the intersection of Estrada Avenue and H Street if a decision is made to signalize that intersection, but the project fair share contribution would be about 9.1 percent.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT TRAFFIC-4a: Cumulative Contribution to 2030 Traffic Volumes. The project will contribute towards future (2030) traffic volumes including trips associated with the development of the Santa Margarita Ranch Agricultural Residential Cluster Subdivision, that will degrade the LOS at the intersection of Estrada Avenue (SR 58) and El Camino Real, and at the intersection of Estrada Avenue and H Street (location of the Santa Margarita Elementary School pedestrian crossing).</p>	<p>MM TRAFFIC-4a: Cumulative Contribution to 2030 Traffic Volumes. The applicant/quarry operator shall enter into an agreement with the County to pay their fair share of improvements necessary to identified intersections in the community of Santa Margarita. The applicable fair share is currently estimated at 8.1 percent based on proportional contribution by the project to traffic at the intersection of Estrada Avenue and El Camino Real. The estimated fair share for signalization at Estrada Avenue and H Street is 9.1 percent. The fair share contribution shall be evaluated and the agreement updated as necessary by the County in consultation with Caltrans, prior to the issuance of each Notice to Proceed for each phase of the quarry.</p>	<p>Although the proposed mitigation would reduce impacts to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, it cannot be assured that all improvements would be feasibly constructed prior to the time when they are needed. As a result, cumulative traffic impacts would remain significant and unavoidable.</p>
<p><u>IMPACT TRAFFIC-4b: Impacts to SR 58 (Deterioration of Roadway Structural Conditions).</u> The project would cause incremental damage and wear to roadway pavement surfaces along SR 58.</p>	<p><u>MM TRAFFIC-4b: Impacts to SR 58 (Deterioration of Roadway Structural Conditions).</u></p> <p>The project applicant shall implement one of the following Options:</p> <p><u>Option 1: Prior to issuance of the Notice to Proceed, the Applicant shall prepare a pavement monitoring program for SR 58 between MM 0.00 and MM 5.44 for review and approval by the County in consultation with Caltrans. The program shall provide before and after video evidence of pavement conditions, require the posting of a pavement repair bond or other mechanism to fund the repair of roadway deterioration resulting from the project, and a mechanism that ensures the funds collected will only be used for improvements / repairs to SR 58 between MM 0.00 and MM</u></p>	<p><u>Less than significant</u></p>

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Description of Impact	Mitigation Measure	Residual Impact
	<p><u>5.44. The Applicant shall coordinate with Caltrans regarding the details of the monitoring program and any requirements for road repair should they become necessary. The program shall include criteria for when maintenance is required and the type of repairs required for various pavement deterioration conditions that may result from heavy truck traffic. Any improvements / repairs resulting from the pavement monitoring program shall be made in accordance with the most current "Complete Streets Implementation Action Plan" prepared by Caltrans to implement Deputy Directive 64-R1.</u></p> <p><u>Option 2: Prior to issuance of the Notice to Proceed, the Applicant shall enter into an agreement in a form acceptable to the County of San Luis Obispo or Caltrans to pay for the project's fair share of impacts to SR 58 roadways (between MM 0.00 and MM 5.44). The agreement shall include a mechanism that ensures the funds collected will only be used for improvements/repairs to SR 58 between MM0.00 and MM5.44. The cost per load / cost per ton shall be established using project generated information and / or assumptions consistent with Caltrans standards including the cost associated with any improvements required by the most current "Complete Streets Implementation Action Plan" prepared by Caltrans to implement Deputy Directive 64-R1. The Applicant shall be responsible for costs associated with implementation of this measure as required by either the County of San Luis Obispo or Caltrans. The cost per load / cost per ton shall be subject to annual adjustment based on the Caltrans Construction Cost Index however, in no case shall a negative cost index be allowed to reduce the previous year's fee. The beginning index date shall be the date that the project receives approval by the hearing body.</u></p>	





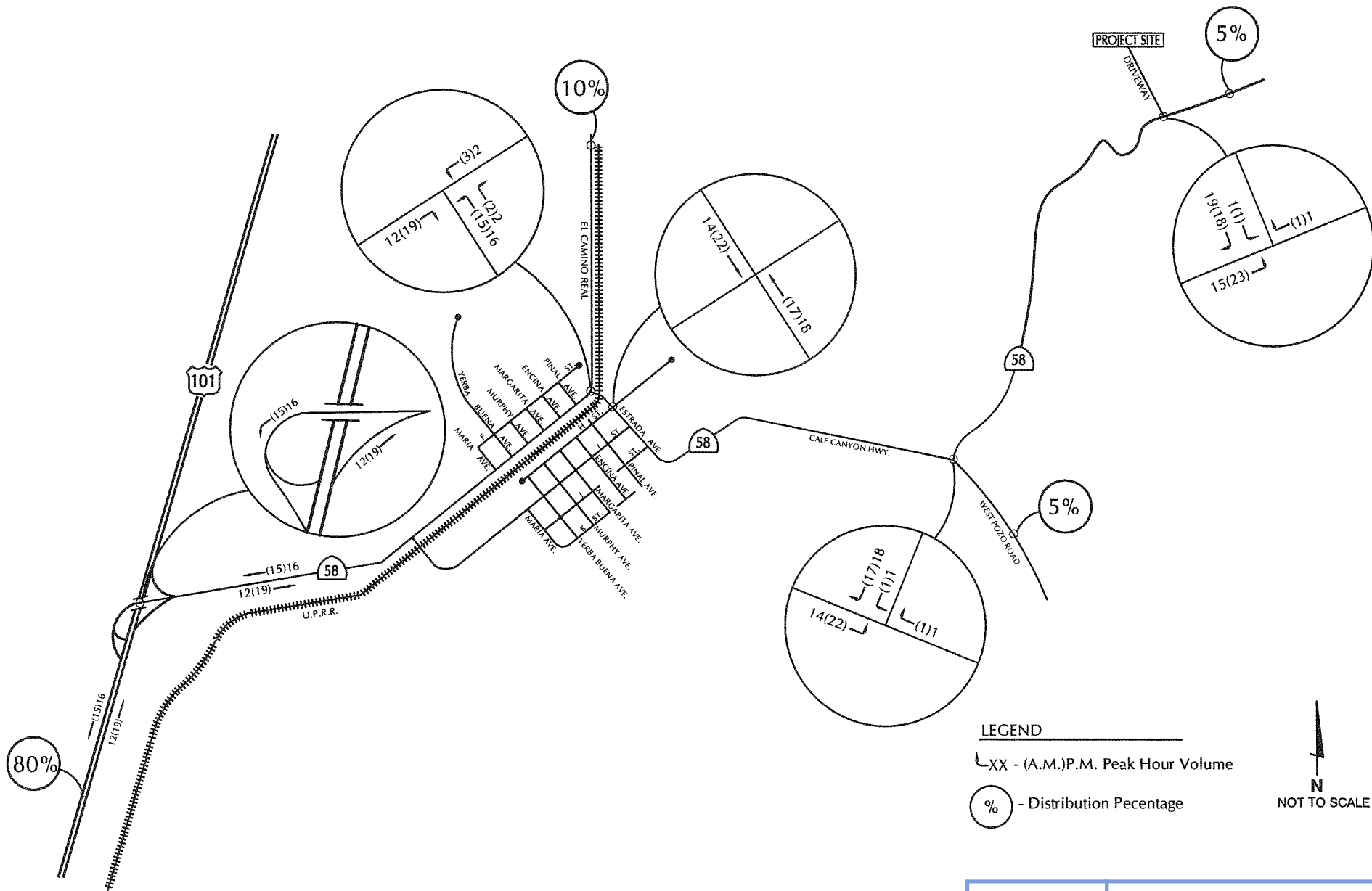
LEGEND

LXX - (A.M.)P.M. Peak Hour Volume

N
NOT TO SCALE

Figure 4.11-2	Existing Traffic Volumes
URS	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>

Source: Associated Transportation Engineers
April 24, 2012



LEGEND

LXX - (A.M.)P.M. Peak Hour Volume

% - Distribution Percentage

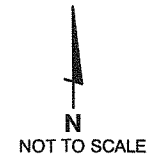


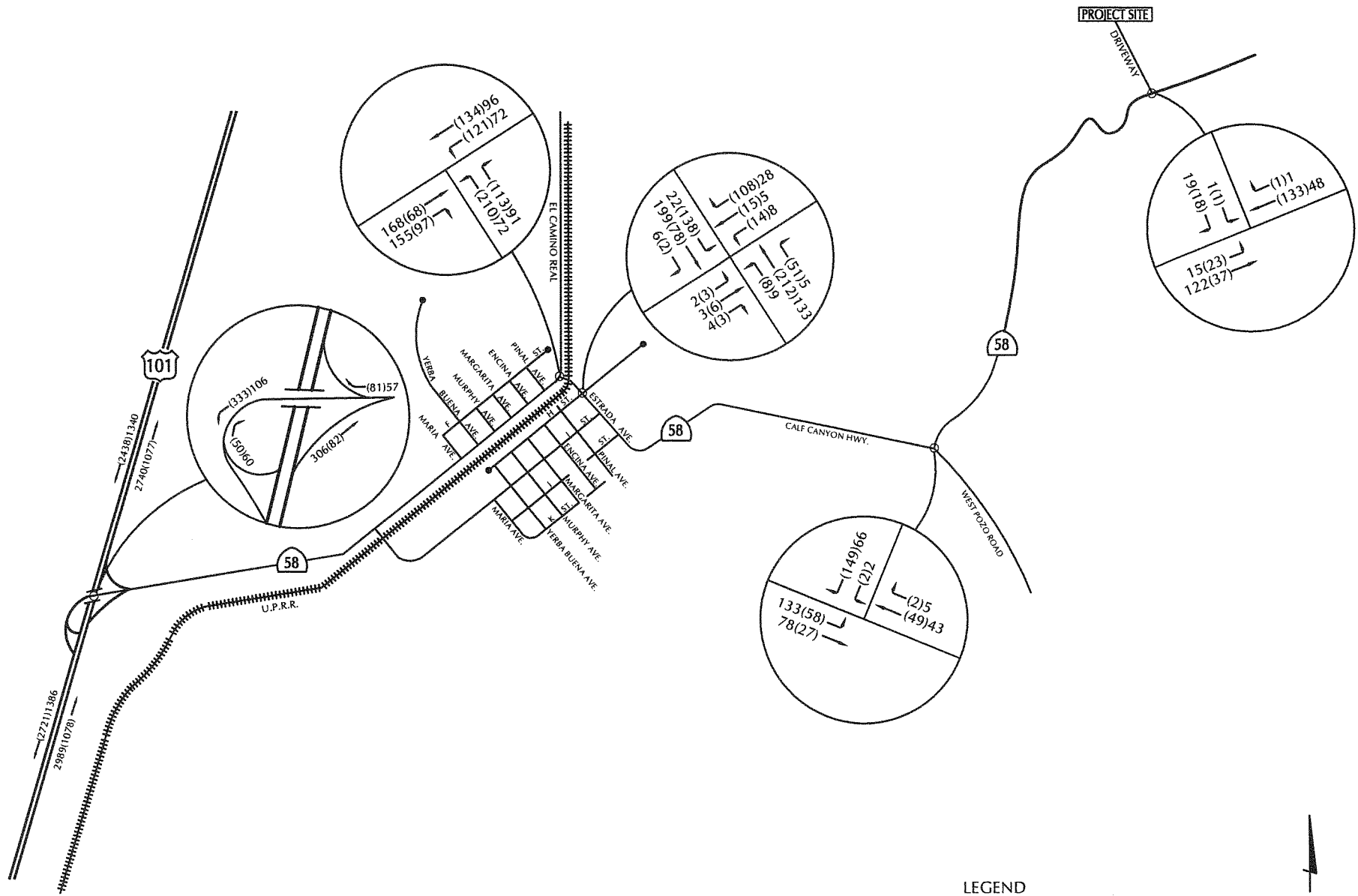
Figure 4.11-3

Project Trip Distribution and Assignment



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

Source: Associated Transportation Engineers
April 24, 2012



LEGEND

LXX - (A.M.)P.M. Peak Hour Volume

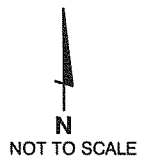


Figure 4.11-4	Existing and Project Traffic Volumes
URS	Oster/Las Pilitas Quarry EIR San Luis Obispo County

Source: Associated Transportation Engineers
 April 24, 2012



Legend

Source: Associated Transportation Engineers

1 inch = 50 feet

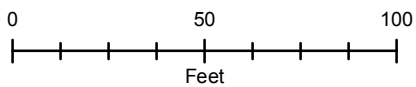
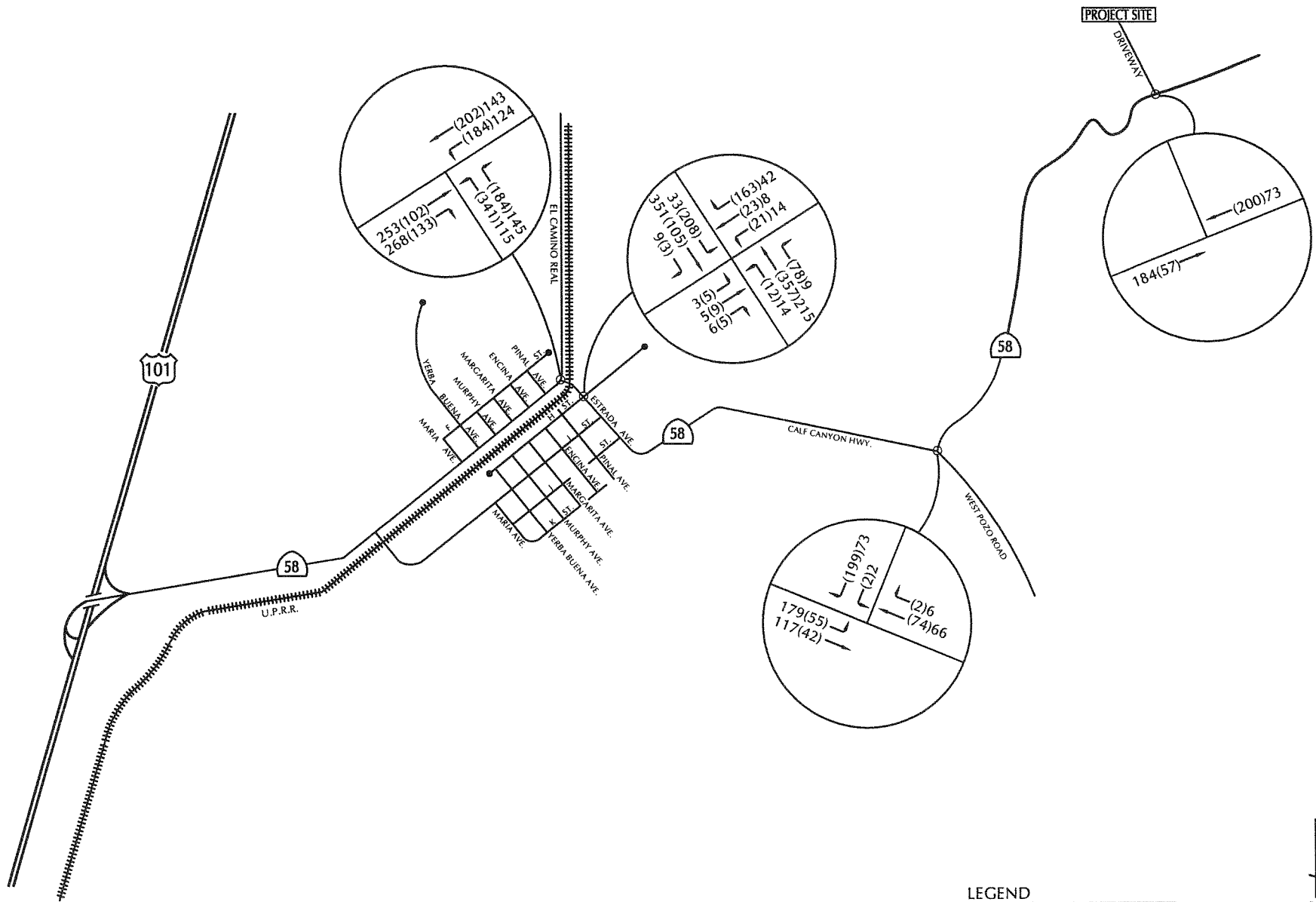


Figure 4.11-5

Highway 58 Curve



*Oster/Las Pilitas Quarry EIR
San Luis Obispo County*



LEGEND

LXX - (A.M.)P.M. Peak Hour Volume

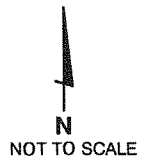
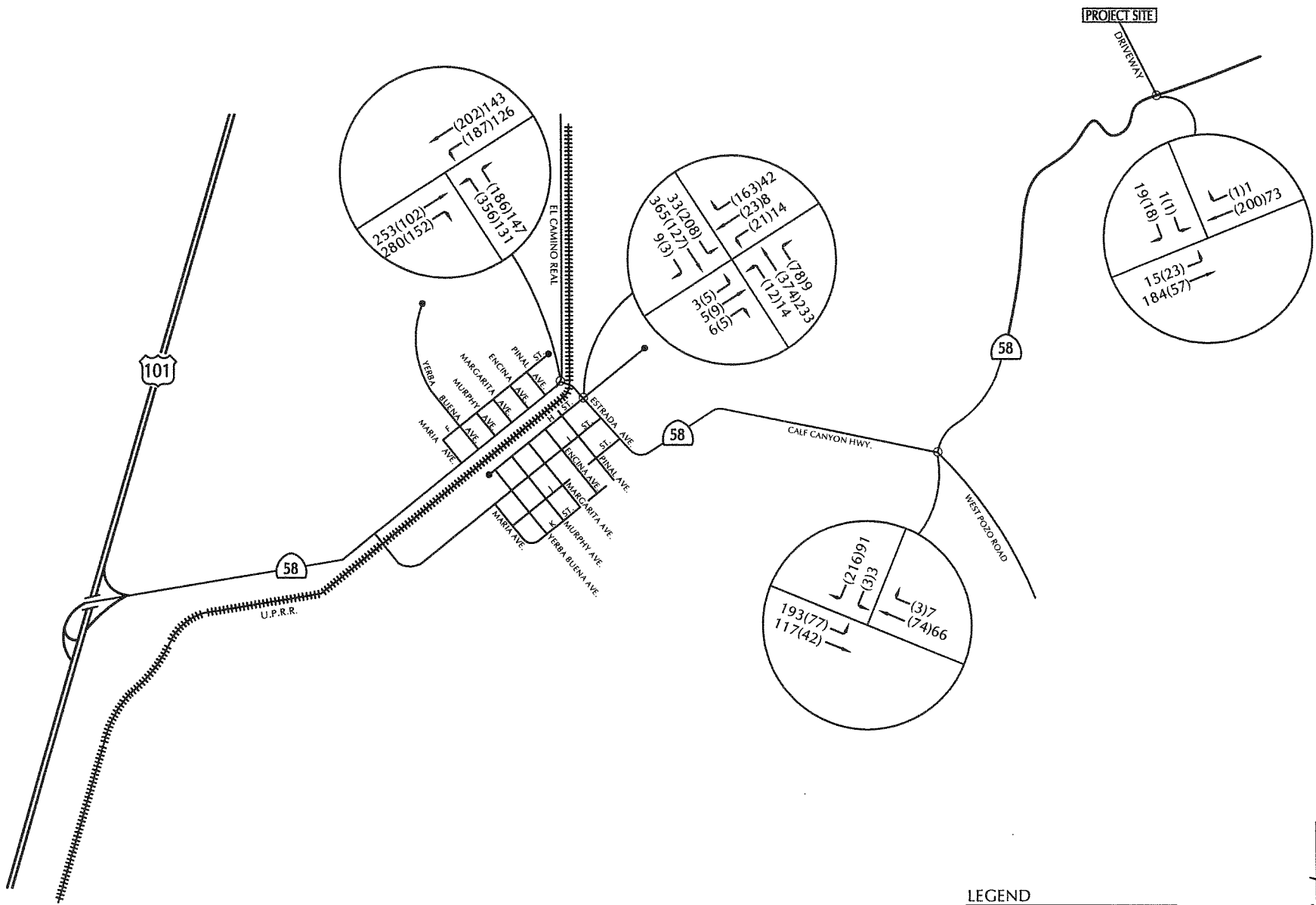


Figure 4.11-6

2030 No Project
Traffic Volumes



Oster/Las Pilitas Quarry EIR
San Luis Obispo County



LEGEND

└XX - (A.M.)P.M. Peak Hour Volume

N
NOT TO SCALE

Figure 4.11-7

2030 and Project
Traffic Volumes



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

4.12 WASTEWATER

4.12.1 Existing Conditions

The proposed surface mining operation is located north of both State Route 58 and the Coastal Branch of the California Aqueduct, approximately three miles northeast of the unincorporated community of Santa Margarita. No urban or public wastewater disposal services are presently provided to the site. The project design includes a new septic tank and leach field to serve the wastewater needs of the project employees. Appropriate percolation tests and design measures will be incorporated into the facility to minimize the potential for water pollution, in accordance with County requirements.

Based on information from the Natural Resource Conservation Service (2011), the following soils are present on the site:

- Cieneba coarse sandy loam, 30 to 75 percent slopes
- Cieneba-Andregg complex, 30 to 75 percent slopes
- Metz loamy sand, 0 to 5 percent slopes
- Xerofluvents-Riverwash association

The Agriculture section of this EIR (Section 4.2) contains more information regarding these soils. For purposes of effluent disposal from septic systems, all of these soils are described as having “Limitations.” The reasons for the limitations vary by soil type, and include the following:

- Depth to bedrock <40 inches
- Slopes >15 percent
- Restricted permeability due to bedrock or hardpan
- Seepage in bottom layer

These limitations are not unique to the subject property; they are associated with the soils in the region including similar areas in the Residential Rural designation where large lot subdivisions have occurred with reliance on septic and leach field systems.

4.12.2 San Luis Obispo County Plans and Policies

The Plans and Policies of the San Luis Obispo County General Plan are applicable to Wastewater impacts relative to this proposed surface mining operation are shown in Table 4.12-1 below.

**TABLE 4.12-1
POLICY CONSISTENCY ANALYSIS – WASTEWATER**

Source	Policy Statement	Discussion	Preliminary Determination
Land Use Element Planning Principle 1, Policy 2	Keep the amount, location and rate of growth allowed by the Land Use Element within the sustainable capacity of resources, public services and facilities.	The proposed project's scale of potential employment is not large enough to cause a large migration of people to the area and cause a strain on any of these factors.	Potentially Consistent

4.12.3 Regulatory Setting

Regulations and guidelines on proper wastewater system design and criteria are found within the County’s Plumbing Code. See Chapter 7 of the Building and Construction Ordinance (Title 19), the “Water Quality Control Plan, Central Coast Basin” (Regional Water Quality Control Board) and the California Plumbing Code. These regulations include specific requirements for both on-site and community wastewater systems. For on-site septic systems, the following key factors must be considered for a system to operate successfully:

- Sufficient land area (refer to the County’s Land Use Ordinance or Plumbing Code): Depending on water source, minimum parcel size requirements will range from one acre to 2.5 acres.
- The soil’s ability to percolate or “filter” effluent before reaching groundwater supplies (30 to 120 minutes per inch is ideal).
- The soil’s depth: There needs to be adequate separation from the bottom of the leach line to bedrock (at least 10 feet) or high groundwater (5 to 50 feet, depending on percolation rates).
- The soil’s slope. Surface areas which are too steep create a potential for day lighting on effluent.
- Potential for surface flooding.
- Distance from existing or proposed wells (minimum 100).
- Distance from creeks and water bodies (minimum 100 feet).

4.12.4 Assessment Methodology

The methodology for this Assessment included identification of the soil constraints (“Limitations”) for on-site septic systems (as presented by NRCS 2011), and review of

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WASTEWATER**

applicable codes and regulations in the Initial Study and Notice of Preparation prepared for the project.

4.12.5 Significance Criteria

With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following significance criteria to determine project effects for wastewater within San Luis Obispo County. Accordingly, the Las Pilitas Quarry project will have a significant impact if it will: violate waste discharge requirements or Central Coast Basin plan criteria for wastewater systems; and/or change the quality of surface or groundwater (e.g., nitrogen-loading, day lighting); and/or adversely affect the community wastewater service provider.

4.12.6 Project Impacts and Mitigation Measures

As identified in the Initial Study form prepared for the Notice of Preparation, the site appears to be able to accommodate an on-site septic system that will meet the standards of both the “Water Quality Control Plan, Central Coast Basin” (Regional Water Quality Control Board) and the California Plumbing Code, including all relevant potential constraints of the soil types identified on the site by the Natural Resource Conservation Service (NRCS) Soil Survey. Appropriate percolation test results and documentation of compliance with other County regulations related to installation of septic systems and leach fields will be required prior to the issuance of permits associated with the on-site wastewater disposal system. Potential effects related to the use of an on-site septic system can be mitigated.

Description of Impact	Mitigation Measure	Residual impact
IMPACT WW-1: Demand for Wastewater Disposal Service. The project will contribute to an incremental demand for Wastewater service, which can be provided by an on-site septic system.	MM WW-1: Demand for Wastewater Disposal Service. Prior to the issuance of a permit for the project's septic and leach field system, the applicant/quarry operator shall submit percolation test results and leachfield design details for review and approval by the Department of Planning and Building.	Less than significant

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to protect mineral resources, it is reasonable to expect that future quarries will be approved and constructed in this area.

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WASTEWATER**

Additional development in the vicinity of the project would be served by on-site wastewater disposal systems; no cumulative effects related to Wastewater are anticipated.

Description of Impact	Mitigation Measure	Residual impact
IMPACT WW-2: Cumulative Effects related to Wastewater. The project, in conjunction with future development in the area, may potentially contribute to a small increment of demand for wastewater treatment services.	MM WW-2: Cumulative Effects related to Wastewater. Since this effect is less than significant, no mitigation is required.	Less than significant

4.13 WATER QUALITY AND SUPPLY

4.13.1 Existing Conditions

Water Quality

The site is located adjacent to the Salinas River near the confluence of the Salinas River and a tributary known as Moreno Creek. Moreno Creek and its small tributaries drain the area along Parkhill Road, east of the project site, and have a total watershed of 2,613 acres. Calf Canyon, for which the segment of SR 58 in this area is named, drains a similar sized watershed (about 2,171 acres) that joins the Salinas River in the Hanson Santa Margarita quarry, about one-half mile northwest of the proposed Oster/Las Pilitas Quarry. The southernmost portion of the proposed quarry site drains into Moreno Creek, and most of its operations would be within a small unnamed drainage that leads to the Salinas River about one-half mile to the west.

The Salinas River is one of the major coastal rivers in California, and flows northward approximately 130 miles from its headwaters southeast of Pozo to its mouth in Monterey Bay. The project site is within the upper (southern) portion of the Salinas River drainage, which is generally defined as the Salinas River drainage upstream of (south from) Bradley in southern Monterey County. Thus, the entire length of the Salinas River in San Luis Obispo County is considered in the “upper” watershed. In the Central Coast Regional Water Quality Control Board Basin Plan (RWQCB: 2011), the project site is within the Paso Robles Hydrologic Area (designated HA 309.80 in RWQCB 2001: Figure 2-1). The Paso Robles Hydrologic Area is a large sub-basin within the Salinas Hydrologic Unit (HU 309.00), which is shown in Figure 4.13-1.

In the San Luis Obispo County Master Water Plan, the project site is in the Salinas-Estrella Water Planning Area (WPA 14 in San Luis Obispo County 2012: Figure 2-3. This is WPA 9a in earlier versions.). This large WPA extends from the northern county line to the Santa Margarita WPA, and includes the Paso Robles groundwater basin. The Paso Robles groundwater basin is prominent in both the County Master Water Plan and the RWQCB Basin Plan, and much of the water quality information for the region is oriented towards the Paso Robles groundwater basin and the portion of the upper Salinas River drainage that contains this basin. But the proposed quarry site is not within this groundwater basin; it is about three miles from the nearest point in the Huerhuero Creek drainage to the east, (Creston Sub-Area) or to Santa Margarita in the west (Atascadero Sub-Area), which are the closest points in the Paso Robles groundwater basin (see Figure 4.13-2).

Water quality standards and management programs are based on maintaining water quality necessary to support identified “beneficial uses” of surface and groundwater within the various planning units. The following beneficial uses have been identified for surface waters throughout the Upper Salinas Watershed (RWQCB Basin Plan Table 2-1):

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WATER QUALITY AND SUPPLY**

- MUN – Municipal and Domestic Supply
- AGR – Agricultural Supply
- PROC – Industrial Process Supply
- GWR – Groundwater Recharge
- REC1 – Water Contact Recreation
- REC2 – Non-Contact Water Recreation
- WILD – Wildlife Habitat
- COLD – Cold Fresh Water Habitat
- WARM – Warm Fresh Water Habitat
- MIGR – Migration of Aquatic Organisms
- SPWN – Spawning, Reproduction and/or Early Development of fish
- RARE – Rare, Threatened, or Endangered Species
- COMM – Commercial and Sport Fishing

Water quality objectives are established based on the various beneficial uses listed above. For some individual watersheds, the Basin Plan also defines special water quality objectives. This has been done for the upper Salinas River watershed, and the specific water quality objectives for this area are summarized in Table 4.13-1, below.

**TABLE 4.13-1
SPECIFIC WATER QUALITY OBJECTIVES
FOR UPPER SALINAS RIVER WATERSHED**

Constituent	Water Quality Objective (mg/liter)
Total Dissolved Solids (TDS)	250
Chloride ion (Cl)	20
Sulfate ion (SO ₄)	100
Boron (B)	0.2
Sodium ion (Na)	20

Source: RWQCB 2011: Table 3-7.

Agriculture has been the dominant land use in the upper Salinas watershed. For the most part, the agricultural uses include grazing and pasture land on relatively flat areas such as the southern portion of the Oster property. Vineyards are also being developed in large areas, particularly around Paso Robles but also on portions of the Santa Margarita Ranch. The RWQCB has identified several water quality issues within the overall Salinas watershed.

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These include seawater intrusion near the coast, nitrates in ground water and surface water, pesticides in sediment and animal tissues, mercury in Lake Nacimiento and its tributaries, and erosion and sedimentation (RWCB 1999:3). Most of these pollutants are associated with intensive agriculture and urban sources characteristic of the lower watershed, or with specific uses such as the now abandoned mercury mines in the Las Tablas tributary drainage to Lake Nacimiento.

The upper Salinas River is included in the California and U.S. EPA list of impaired water bodies, required by Section 303(d) of the Federal Clean Water Act, due to excessive concentrations of chloride ions, sodium ions, and due to pH being outside of the acceptable range at some sites. Total Maximum Daily Loads (TMDL) have not yet been established for these pollutants in the watershed (State Water Resources Control Board – SWRCB 2010). The monitoring data that led to the inclusion of the upper Salinas River on the 303(d) list was obtained through the Central Coast Ambient Monitoring Program (CCAMP – RWQCB 2000). The initial CCAMP report was based on 34 sampling locations along the Salinas River, plus additional sample points on major tributaries. The southernmost sampling point was at the point where the Salinas River crosses under SR 41 in Atascadero (Site “SAT” in RWQCB 2000:11). Although the entire upper Salinas River is included on the 303(d) list, a review of the monitoring results for this nearest sample point on the river indicates that in general the water quality at this point was good. Table 4.13-2 below summarizes the water quality at “SAT” (the point nearest the project site) for constituents identified with specific water quality objectives, based on the most current CCAMP data (RWQCB 2007).

**TABLE 4.13-2
SUMMARY OF CCAMP DATA FOR SITE “SAT”**

Constituent	Min. Value	Mean Value	Median Value	Max. Value	No. of Samples	General Notes from CCAMP
TDS (mg/l)	270.0	521.2	510.0	777.0	16	Slightly impacted, decreasing
Cl (mg/l)	11.00	44.94	44.00	85.00	17	Good, decreasing
SO ₄ (mg/l)				Not analyzed		
B (mg/l)	0.061	0.111	0.110	0.170	14	Good, decreasing
Na (mg/l)	19.00	43.79	49.00	59.00	14	Good, decreasing

Source: RWQCB 2007. Summary of data from 1999–2007 for all constituents.

Since the proposed quarry site near the Salinas River is located several more miles upstream from the sampled point, and in an area that is more rural and less developed, it is reasonable to assume that the surface water quality in the river near the project site is better than that shown above.

The Basin Plan describes a series of authorities or control actions that the RWQCB can use to maintain water quality throughout the region. These include the issuance of permits under the

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National Pollutant Discharge Elimination System (NPDES) program for discharges to surface water that are regulated under both the federal and state Clean Water Acts, the establishment of Waste Discharge Requirements (WDR) to regulate material discharges to land that may affect water quality, and various enforcement actions. Mining activities such as the proposed quarry may be subject to individual WDRs (and NPDES permits) or may be covered under statewide NPDES permits that have been established to control releases from construction sites and various industrial uses (RWQCB 2011:IV-40).

Current Water Use and Supply

Project Site. The existing water uses on the property support two residences and some agricultural use – typically watering for up to 30-40 cattle, and a small orchard and garden and landscaping at the main house. Estimated water consumption for recent years (when there has been no extensive irrigation of corn or other field crops) is between 1.5 and 1.7 acre feet per year (afy), so a figure of two afy is assumed in this discussion.

The Oster property directly abuts both Moreno Creek and the Salinas River, and thus has riparian rights to both of these water sources. Water is supplied from a system of wells on both drainages and a concrete spring box along Moreno Creek just upstream from its confluence with the Salinas River. There are two water storage facilities on the property with a combined capacity of 0.7 acre feet. There are five recorded Statements of Diversion and Use filed by the property owner with the SWRCB, which document pre-1914 use of surface water on the property from the Salinas River and Moreno Creek. While the Statements of Diversion and Use by themselves do not establish or constitute evidence of a right to divert and use water, they do provide evidence of the past and existing use of water on the property (California Water Code Section 5106(a) and (c)). The original Statements, and several Supplemental Statements of Use, indicate that approximately 94 afy has historically been diverted for temporary storage from Moreno Creek and from shallow wells associated with the Salinas River.

Both the Salinas River and Moreno Creek water sources are highly dependable, but this discussion will focus on the Salinas River since that source is proposed for use by the quarry project. Appendix F of this EIR contains a Water Supply Assessment prepared pursuant to Water Code Section 10910, et seq. for the project that provides details of the available Salinas River water supply, which is summarized in the following paragraphs.

Upstream from the project site, the drainage of the Salinas River includes over 100,000 acres, as shown in Figure 4.13-3. The Salinas Dam and Santa Margarita Reservoir are located about six miles upstream (south) from the project site. This reservoir holds approximately 23,000 acre feet of water and supplies municipal drinking water to the City of San Luis Obispo, under an agreement with the U.S. Army Corps of Engineers. As part of the permit for diversion and use associated with this dam, the City of San Luis Obispo is required to release a sufficient volume of water from the dam to maintain the pre-existing downstream uses of

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water (SWRCB 1978). In simple terms, this condition requires releases from the dam to maintain surface flow in the river during dry months. The County of San Luis Obispo operates the dam and related facilities under an agreement with the City. A stream gauge just downstream from the dam measures flows in the river at this point. Based on data from that gage, annual flows from 1987 through 2009 ranged from a low of 808 afy (rainfall year beginning April 1 1990) to over 80,000 afy (in 1997). The median annual flow over the same period was 8,660 afy.

Santa Margarita. The community of Santa Margarita is located about three miles to the southwest from the project site, and is provided water from two wells in the area by County Service Area 23. The County's 2009-2010 Annual Resource Summary Report (San Luis Obispo County 2011) describes the water supply and system as follows:

[Santa Margarita's] water supply is provided by two wells. The primary source is a high-producing well in a shallow formation subject to seasonal fluctuations. The secondary well is in a low-producing formation and is used in combination with the primary well in order to meet demand during hot weather periods and for operational flexibility. The two wells are capable of meeting the community's current needs (CSA 23); however, an additional source of water is needed since the back-up well in the low-producing formation is incapable of meeting the needs of the town by itself should the main well fail for some reason (a CA Title 22 requirement).

At this time, the community is evaluating alternatives for a small additional supply for the purpose of drought reliability. Those options are a connection to State Water or Nacimiento Water for 5 AFY, with an exchange agreement with a water contractor that would allow the water to be banked and withdrawn only when it is needed. In 2012 the community voted against the State water intertie project but the Nacimiento water intertie project is an available option subject to grant funding (Proposition 84 Drought Grant).

The two wells used by CSA 23 as discussed above draw water from shallow alluvium along Santa Margarita Creek (the primary well) and from deeper groundwater in the Santa Margarita formation 780 feet beneath Yerba Buena Creek, near the eastern end of the community (San Luis Obispo County 2012 Santa Margarita Water Supply Reliability Report: page 1). Because of their location and depth, these wells are not strongly dependent on surface flows in the Salinas River, and neither would be influenced by any activities on the Oster property or water use by the proposed quarry.

Parkhill Road. The project site and the lands along Parkhill Road to the east are at the southern edge of Water Planning Area 14: Salinas/Estrella, in the County Master Water Report (San Luis Obispo County 2012: Figure 4.14). The Master Water Report identifies "Park Hill" as one of several "...more developed supply sources of the County that are

outside of groundwater basins...” discussed in the report but not analyzed in detail (San Luis Obispo County Master Water Report 2012:page 4-55).

The Las Pilitas Area Plan (San Luis Obispo County 2003: page 5-3) describes the lands along Parkhill Road as follows:

The area has limited water resources, and properties must rely on individual wells located in Moreno Creek and small local drainage ways. Rural residential use should be confined to existing lots in this area so as to not further over-burden an already limited water capability.

Moreno Creek flows into the Oster property, and its confluence with the Salinas River is also within the Oster property. The primary diversion point on the Oster property for use of water from Moreno Creek is a concrete box in the drainage just south of SR 58. Surface water in this structure flows by gravity to a stock pond (north of SR 58) and then into the Salinas River. This system does not forcibly withdraw water from the Moreno Creek basin so it has no effect on the depth to the water table at upstream wells.

4.13.2 San Luis Obispo County Plans and Policies

Table 4.13-3 below summarizes County policies related to water quality and supply. All of the identified policies are from the Conservation and Open Space Element (COSE San Luis Obispo County May, 2010).

4.13.3 Regulatory Setting

The Federal Clean Water Act of 1972, and subsequent amendments, forms the overall structure for maintaining surface water quality in the country. The act prohibits point source discharges to surface waters unless a permit under the National Pollutant Discharge Elimination System (NPDES) is obtained from the U.S. EPA. For waters affected by broader pollutant issues, the CWA requires the identification of impaired water bodies, in which pollutant concentrations will adversely affect beneficial uses of the water. For these water bodies, Total Maximum Daily Loads (TMDL) for pollutants from natural and man-made sources must be specified and implemented through management practices and permit procedures.

The California Porter-Cologne Water Quality Control Act of 1969 established the authorities of the SWQCB and the nine RWQCBs throughout California, and set up the basin planning and regulatory procedures to control discharges that adversely affect surface and ground waters. The federal programs from the Federal Clean Water Act are also administered by these state agencies.

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**TABLE 4.13-3
POLICY CONSISTENCY ANALYSIS – WATER QUALITY AND SUPPLY**

Source	Policy Statement	Discussion	Preliminary Determination
COSE Chapter 10, Policy WR 1.12	Impacts of New Development: Accurately assess and mitigate the impacts of new development on water supply (GM1). At a minimum, comply with the provisions of Senate Bills 610 and 221.	Water Supply Assessment compliant with SB 610 was prepared for project (Appendix F of this EIR). SB 221 (chaptered at Government Code Section 66473.7) does not apply, since the project does not include a residential subdivision map.	Consistent
Policy WR 1.14	Avoid Net Increase in Water Use: Avoid a net increase in non-agricultural water use in groundwater basins that are recommended or certified as Level of Severity II or III for water supply. Place limitations on further land divisions in these areas until plans are in place and funded to ensure that the safe yield will not be exceeded.	Project site is not in area affected by Level of Severity II or III, and will not affect groundwater basin. The community of Santa Margarita is not in an area affected by Level of Severity II or III.	Potentially Consistent
Policy WR 3.1	Prevent Water Pollution: Take actions to prevent water pollution, consistent with federal and state water policies and standards, including but not limited to the federal Clean Water Act, Safe Drinking Water Act, and National Pollutant Discharge Elimination System (NPDES).	Project will be subject to Statewide General NPDES permits; will have Stormwater Pollution Prevention Plan incorporating Best Management Practices; and will be subject to review by the RWQCB. Concrete recycling operation will not accept hazardous grade material.	Potentially Consistent

The initial water quality regulatory mechanism applicable to the project is the Statewide General Permit issued under SWRCB Order No. 2009-0009-DWQ, NPDES No. CAS000002, which applies to stormwater discharges from all construction projects disturbing more than one acre of land. The focus of the general permit is to control erosion and the discharges of sediment on the basis of erosion risk levels. All dischargers covered under the permit are required to file Permit Registration Documents (PRD), and to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). Best Management Practices are required to avoid discharges of any debris or non-stormwater material, and training provisions are required for those developing and implementing the SWPPP.

A similar Statewide General Permit applies to industrial uses. In part, the applicability of this permit is defined by the Standard Industrial Code (SIC) describing the use. For this project, the SIC is 1423 – Mining, crushed and broken granite, and this is one of the uses to which the General Industrial Permit applies. This permit is issued under SWRCB Order No. 97-03-DWQ, NPDES No. CAS000001. Dischargers are required to file a Notice of Intent to be

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covered under the General Permit, and to prepare and implement a SWPPP. This permit was updated on April 1, 2014 with the adoption of Order NPDES CAS000001 by the SWRCB. The updated General Permit for Storm Water Discharges Associated with Industrial Activities establishes new procedures, but retains the monitoring and enforcement provisions of the previous Order No. 97-03-DWQ.

Finally, SWRCB Order No. 2003-0005-DWQ, NPDES No. CAS000004, addresses stormwater discharges from small municipal separate storm sewer systems (i.e., drainage systems) and applies to San Luis Obispo County. This permit requires that local governments develop Stormwater Management Plans incorporating various actions to help reduce water pollution from runoff including: public education and participation, detection and elimination of illicit discharges, regulation of runoff from construction sites, and management of stormwater from developed areas. San Luis Obispo County implements these requirements through its NPDES Phase II Stormwater Management Program and through requirements set forth in Section 22.10.155 of the Land Use Ordinance addressing Stormwater Management. Provisions of this section include the requirement for a Stormwater Quality Plan incorporating Best Management Practices in compliance with the Low Impact Development Handbook, and planning to control drainage, erosion and sedimentation and to maintain the provisions for the life of the project. The proposed surface mine is not explicitly among the categories of projects to which this section applies (see Section 22.10.155 B.). ~~In the event the County determines that this section does apply to the project, then its application would take the place of the Statewide General Permit for industrial uses described above. In either case, non-stormwater discharges would be prohibited and stormwater discharges would be managed through the required plans and regulatory process.~~

The RWQCB also has review authority over the project, and could determine that it is necessary to establish Discharge Requirements for the project under a separate permit. In this event, the RWQCB permit would incorporate regulation of all potential discharges from the project.

Other regulations at the state level control the use and storage of hazardous materials that may be involved in the operation, and other aspects of the mining (such as blasting), so they are conducted in a manner that protects the public health and the environment.

With respect to water supply, the County of San Luis Obispo must approve a Conditional Use Permit for the project (consistent with Sections 22.62.060 (CUP) and 22.36.010 (Surface Mining and Reclamation) of the County Code). These required approvals cause the project to be subject to review under CEQA, which requires a demonstration of adequate water supply. Since there is no utility company or service district that provides water in the project vicinity, and because the project proposes an industrial use on a property that is greater than 40 acres in size, the County prepared a Water Supply Assessment for the proposed development (California Water Code Section 10910(c) (3)). The Water Supply Assessment is included within this EIR as Appendix F.

4.13.4 Assessment Methodology

The assessment of project effects on water quality and supply is based on a review of information prepared for the mining plan and submitted as part of the CUP application. This information included the location and preliminary design for three detention basins in the project (Sheets 2, 4, and 6 of the submitted plans, and details provided in sheets 11, 12, and 13, and related material in Tartaglia 2009). Applicable County policies and procedures were reviewed, along with existing Statewide General Permits regulating stormwater runoff from construction and industrial uses. Original and Supplemental Statements of Diversion and Use filed for the Oster property, and several historic and current permits related to management of the Santa Margarita reservoir and Salinas Dam were also reviewed. Washing is not required for any of the aggregate materials planned to be produced by the project, and this process is therefore not evaluated in this EIR. In the event that aggregate material washing is proposed in the future, additional CEQA review would be required. The general effects of the project were compared to applicable regulations and other data in order to determine the likelihood of compliance by the project with all applicable requirements.

4.13.5 Significance Criteria

The Initial Study prepared for this project addresses water quality and supply issues in terms of five issues or questions to determine if the proposed project would do any of the following:

- a. Violate any water quality standards; and/or
- b. Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.); and/or
- c. Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.); and/or
- d. Change the quantity or movement of available surface or groundwater: and/or
- e. Adversely affect community water service provider.

4.13.6 Project Impacts and Mitigation Measures

The criteria listed above were used to assess the effects of the project and to define any potential impacts and appropriate mitigation measures.

Alteration of Runoff Water

This issue related to the impact criteria “a” and “b” noted above. The project will include the grading and construction of the access road, retaining walls, water system, and excavations and rock processing associated with the quarry. All of these activities will involve ground disturbance with the possibility of increasing erosion and discharging sediments and contaminants associated with grading and construction activities. Rock crushing and storage

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will occur within the processing area, and heavy equipment will operate regularly on the site. Storage of recycled concrete and asphalt would be included in later phases of the project. The project does not include a fuel storage tank, but heavy equipment will be used and stored on-site and will be fueled and serviced by mobile providers on-site. These aspects of the project involve the use of hazardous materials (fuel, oil) that would adversely affect surface water quality if improperly discharged. This is a potential significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
<p>IMPACT WQ-1: Alteration of Runoff Water. The project would disturb an area of approximately 41 acres, draining towards Moreno Creek (entrance road and Phases 1A and 1B), and in the northern unnamed creek drainage towards the Salinas River. The grading and quarry activities may introduce pollutants including sediment, and materials associated with quarrying and rock processing, into these surface waters through stormwater runoff and/or dry season releases.</p>	<p>MM WQ-1a: Alteration of Runoff Water/Construction Activities. The applicant/quarry operator shall submit appropriate Permit Registration Documents (PRD) to the SWRCB to provide coverage of the construction of the project (utilities, entrance road, and completion of construction through the end of Phase 1B or other point as appropriate under the Statewide General Permit for Construction (SWRCB Order No. 2009-0009-DWQ, NPDES No. CAS000002, or more current permit). Evidence of such coverage shall be provided to the County prior to the start of construction. All measures to control stormwater runoff and minimize discharges identified in the PRDs and related plans shall be timely implemented during construction.</p> <p>MM WQ-1b: Alteration of Runoff Water/Mining Activities. The applicant/quarry operator shall submit Permit Registration Documents a Notice of Intent (NOI) and a related Stormwater Pollution Prevention Plan (SWPPP) to the SWRCB to provide coverage of the surface mine as an industrial use under the <u>General Permit for Storm Water Discharges Associated with Industrial Activities Statewide General Permit for Industrial Uses</u> (SWRCB Order No. 97-03-DWQ, and NPDES No. CAS000001, or more current permit). Evidence of such coverage shall be provided to the County prior to the start of Phase 1A. Measures to control stormwater runoff and minimize discharges identified in the documentation related to this permit shall be implemented, and be subject to monitoring and verification as provided in the permit. <u>In the event the project comes under the regulation of the County stormwater provisions and general Nationwide Pollutant Discharge Elimination System Permit.</u> Alternatively, this condition may be met through compliance with the County Stormwater Management provisions of Section 22.10.155 of the Land Use Ordinance.</p> <p>MM WQ-1c: Alteration of Runoff Water/Equipment Maintenance. The applicant/quarry operator shall provide parking areas for equipment and servicing of equipment, and storage areas for any hazardous materials or other pollutants kept on-site, that have controlled drainage such that in the event of an accidental spill pollutant runoff to off-site surface water will not occur.</p>	<p>Less than significant</p>

Alteration of Groundwater

This issue is related to criterion “c” noted above, dealing with effects on the quality of groundwater. The project will include the construction of a septic and leach field system to

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provide domestic wastewater treatment for approximately five workers on-site. This is considered a potential significant discharge to groundwater that can be mitigated through appropriate design and construction of the system, and is discussed in Section 4.11 of this EIR as Impact and Mitigation WW-1. Alteration of groundwater is a potential significant impact that can be mitigated.

Description of Impact	Mitigation Measure	Residual Impact
IMPACT WQ-2: Alteration of Groundwater. The project will discharge septic effluent via an on-site leach field, which has potential to contaminate groundwater.	MM WQ-2: Alteration of Groundwater. Mitigation Measure WW-1 (Section 4.12) serves as adequate mitigation for Impact WQ-2.	Less than significant

Increased Use of Surface Water

This issue relates to criteria “d” and “e” above dealing with changing the quality or movement of surface or groundwater, and affecting other water suppliers. As presented in the Water Supply Assessment for the project (see Appendix F) the proposed quarry will use about 4,000 gallons of water per day for dust control, about 500 gallons per day for domestic purposes, and up to 1,000 gallons per day for irrigating revegetation as part of the mine reclamation, for a total of 5,500 gallons per day. This total is about 5 afy. Water for the quarry use would be drawn from a shallow well about 80 feet from the Salinas River in the ranch compound of the property owner, identified as “Well A.” A pumping test on Well A demonstrated its ability to provide a minimum of 25 gallons per minute, which is more than sufficient for the proposed use. The water drawn from the well is part of the subsurface flow in the Salinas River and is part of the riparian rights water that has been used on the property for many years. Combined with the existing recent uses by the two residences and ranch activities on the property (approximately 2 afy), the estimated total water use on the property would be approximately 7 afy. Thus, the quarry project would more than triple the current water use on the property. This amount is lower than the water used in previous agricultural activities on the property, and much lower than the potential use indicated in the Statements of Diversion and Use (over 94 afy). The total projected water use with the quarry project and current uses (7 afy) is very much lower than the lowest base flows maintained in the Salinas River near the project vicinity (about 800 afy).

The Oster property is not within the boundaries of a district or other water supplier, and is about three miles from CSA 23, which serves the Santa Margarita area. Since the wells used by CSA 23 relies on shallow water in Santa Margarita Creek, and much deeper water beneath Yerba Buena Creek, the project is not expected to have any effect on the CSA water supply. The project is also not expected to affect surface flows or groundwater in the Moreno Creek drainage, which is upstream from the point near the Salinas River where Well A is located. Thus, the effects of the proposed quarry on the use of surface water would be less than significant.

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Description of Impact	Mitigation Measure	Residual Impact
IMPACT WQ-3: Increased Use of Surface Water. The project will increase total water use on the property from approximately 2 afy to 7 afy. This amount may potentially require an increase in the use of surface water.	MM WQ-3: Since this effect is less than significant, no mitigation is required.	Less than significant
IMPACT WQ-4: Effect on Community Water Service Provider. This project could potentially affect a nearby water service provider such as CSA 23 in Santa Margarita.	MM WQ-4: Since this effect is less than significant, no mitigation is required.	Less than significant

Cumulative Effects

The project is about one-half mile from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to promote mineral extraction, it is reasonable to expect that future quarries will be approved and constructed in this area. The La Panza Granitics EX1 Combining Designation is within the Upper Salinas River watershed, and includes the drainage basin of Moreno Creek along Parkhill Road west of the proposed quarry.

In the larger region of the Upper Salinas River watershed, several instances of surface water contamination related to non-point sources have led to the designation of this portion of the Salinas River as an impaired water body. As discussed in Section 4.13.1 above, the water quality problems have been associated with a combination of urban and intensive agricultural uses that occur much farther north (downstream) in the watershed. The available data shown in Table 4.13-2 indicate generally good water quality in the vicinity of the project. This fact, coupled with the implementation of requirements that will avoid or minimize the potential for pollutant discharges to surface waters (Mitigation Measures WQ-1a and 1b), indicate that the cumulative effect of the project with other water quality influences in its surrounding area would be less than significant.

The base flows in the Salinas River result from rainfall and runoff in its watershed upstream from the project site and from periodic releases that are mandated by the SWRCB permit for the Santa Margarita Reservoir. These releases are designed to ensure the protection of all downstream surface and shallow subsurface water uses that existed prior to construction of the dam and reservoir in the 1940s. The project will not significantly affect flows in the river, and will not contribute a substantial fraction towards cumulative use of water from the Salinas River. The Hanson Santa Margarita Quarry also uses water from surface and underflow in the Salinas River. Water use by Hanson includes about 300 afy for wet crushing and processing, but most of this water is re-cycled and re-used. The net consumption for processing is about 30 afy. An additional 55 afy is used for dust control, and the proposed expansion of the Hanson Santa Margarita Quarry will require an additional 2-3 afy. Thus, the

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total anticipated net water consumption expected at the Hanson facility is about 88 afy all of which comes from the Salinas River (Golder Associates 2012:4). Since the minimum or base flow in the Salinas River is about 800 afy, this net use along with that proposed by the Oster/Las Pilitas Quarry and other uses (e.g., residential and agricultural) is still less than significant.

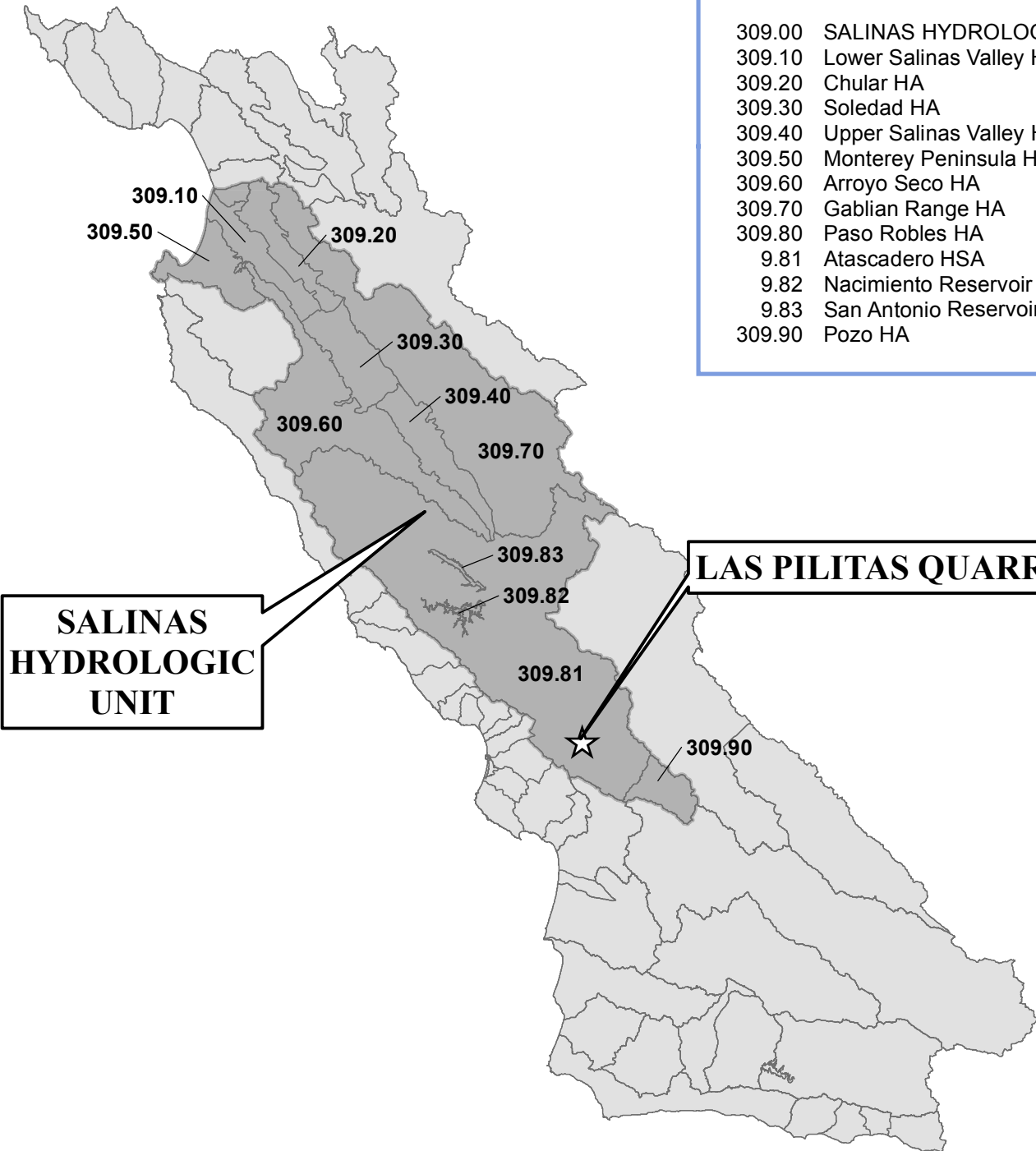
Most of the land in the Upper Salinas River watershed in the project vicinity is within the RL-Rural Lands category, so widespread land development is not anticipated. Future agricultural development will be limited to flatter lands, where vineyards or other more intense uses may occur. On the steeper lands more characteristic of the watershed in the project vicinity, only limited grazing might be expected. Based on this pattern of uses, water shortages are not expected in the portion of the Upper Salinas River watershed that includes the project vicinity. Although not proposed as the water source for the project, the existing Oster ranch obtains much of its water for cattle and other irrigation uses from Moreno Creek. This water from Moreno Creek is not pumped at the Oster property; it flows naturally from a concrete spring box constructed in the creek bed just south of SR 58. It is possible that in a very dry year, substantial pumping of water from Moreno Creek by upstream residences along Parkhill Road could reduce this flow and water supply in Moreno Creek at the Oster property. This has reportedly never happened before, but if it did, the adversely affected user would be the Oster property – because this is a riparian use, not a groundwater withdrawal by pumping. The proposed quarry project is not planned to use water from this source, so it will not affect, or be affected by, any users along Parkhill Road. In the event that the quarry did rely on this Moreno Creek supply, just as the Oster agricultural operations do, it could not adversely affect upstream users or contribute to any short-term declines in water levels along Parkhill Road, due to its location downstream from these users.

In summary, due to the reliable water supply provided by the Salinas River, and the nature of the topography and land uses within the La Panza Granitics region, potential cumulative impacts related to Water Quality and Supply are less than significant.

Description of Impact	Mitigation Measure	Residual impact
<p>IMPACT WQ-5: Cumulative Effects Related to Water Quality and Supply. The project, in conjunction with the nearby Hanson Santa Margarita Quarry and other uses, will continue the use of surface and shallow subsurface water from the Salinas River. This water use could potentially and adversely affect upstream users or contribute to any short-term declines in water levels along Parkhill Road, due to its location.</p>	<p>MM WQ-5: Cumulative Effects Related to Water Quality and Supply. Since this effect is less than significant, no mitigation is required.</p>	<p>Less than significant</p>

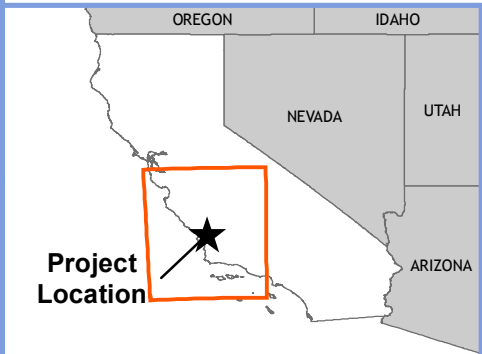
Hydrologic Units, Areas, and Subareas

- 309.00 SALINAS HYDROLOGIC UNIT
- 309.10 Lower Salinas Valley HA
- 309.20 Chular HA
- 309.30 Soledad HA
- 309.40 Upper Salinas Valley HA
- 309.50 Monterey Peninsula HA
- 309.60 Arroyo Seco HA
- 309.70 Gablian Range HA
- 309.80 Paso Robles HA
- 9.81 Atascadero HSA
- 9.82 Nacimiento Reservoir HSA
- 9.83 San Antonio Reservoir HSA
- 309.90 Pozo HA



**SALINAS
HYDROLOGIC
UNIT**

LAS PILITAS QUARRY

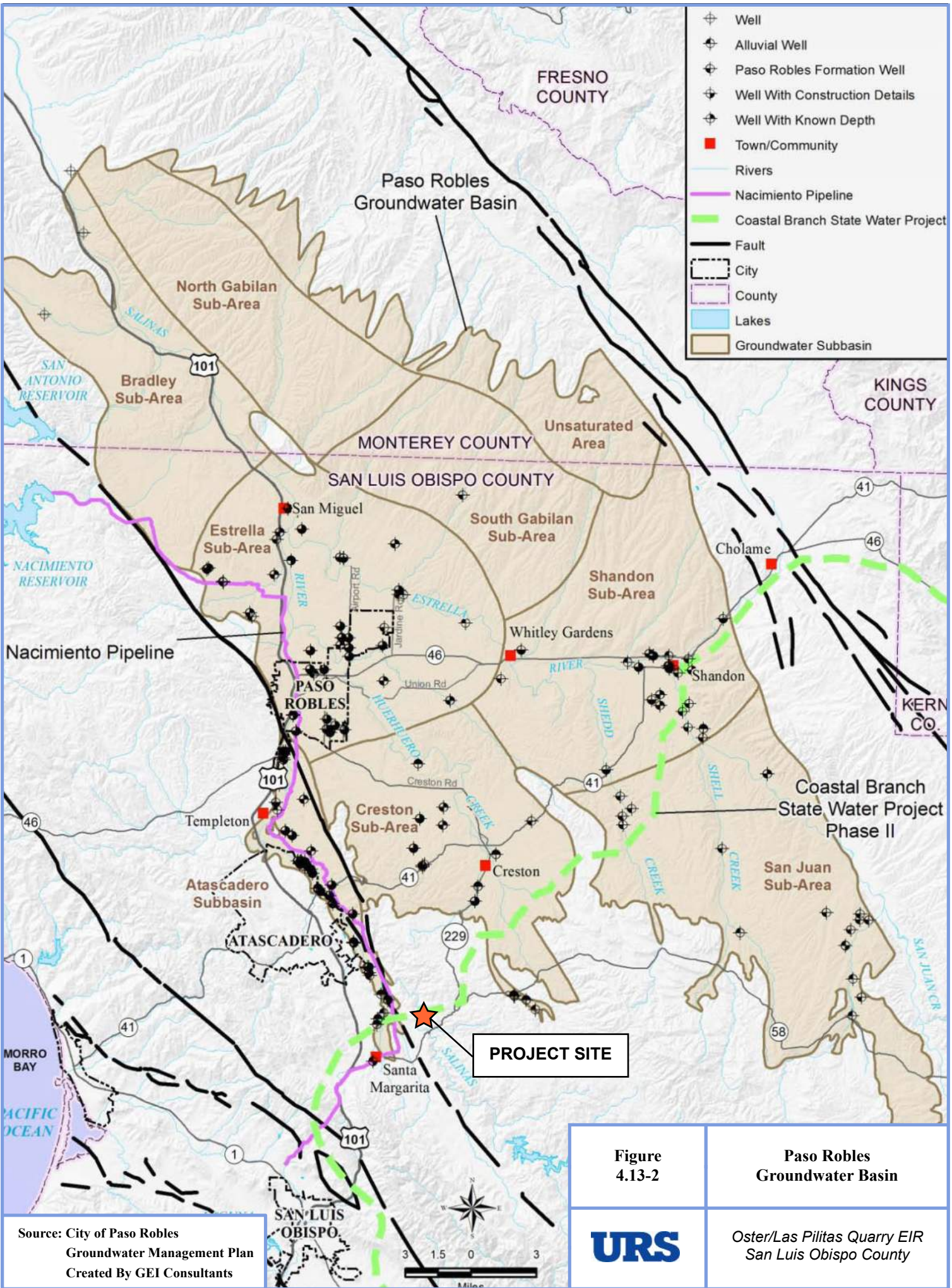


**Project
Location**



Source: Central Coast RWQCB
Acquired through SLO Datafinder

Figure 4.13-1	Central Coast Hydrologic Planning Area
URS	<i>Oster/Las Pilitas Quarry EIR San Luis Obispo County</i>



T:\PROJECTS\Oster Quarry\Maps\Fig 4.13-2 Groundwater Basin.pdf

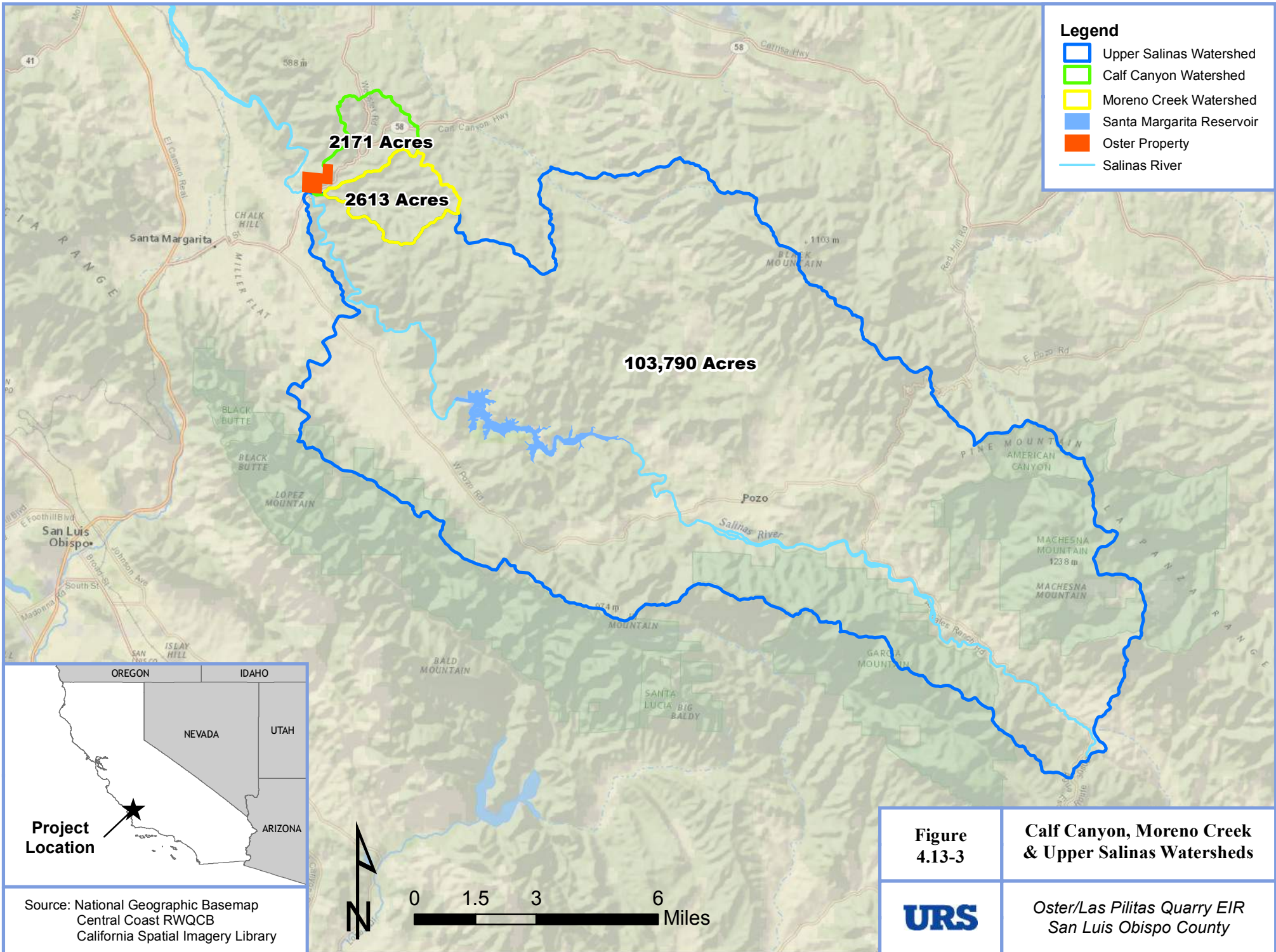
Figure 4.13-2

Paso Robles Groundwater Basin



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

Source: City of Paso Robles
Groundwater Management Plan
Created By GEI Consultants



Legend

- Upper Salinas Watershed
- Calf Canyon Watershed
- Moreno Creek Watershed
- Santa Margarita Reservoir
- Oster Property
- Salinas River

2171 Acres

2613 Acres

103,790 Acres

Project Location

Source: National Geographic Basemap
 Central Coast RWQCB
 California Spatial Imagery Library

Figure 4.13-3

Calf Canyon, Moreno Creek & Upper Salinas Watersheds



*Oster/Las Pilitas Quarry EIR
 San Luis Obispo County*

4.14 LAND USE

4.14.1 Introduction and Existing Conditions

The Initial Study for this project (contained in Appendix A) included a preliminary determination that the proposed quarry would be consistent with all applicable plans, policies, and regulations, and that it would be compatible with surrounding land uses. That preliminary conclusion was based on the review of environmental issues and on the input received from other County departments and other agencies contacted through referrals during preparation of the Initial Study. Since then, completion of the analyses of environmental issues described in the preceding sections has identified several effects that are considered significant impacts that relate to the issue of land use compatibility. These include aesthetics and visual resources, noise, and cumulative traffic effects through the Santa Margarita community.

~~Work has also commenced on a new~~ The Santa Margarita Community Plan, a draft of which was released, reorganized and portions placed in the Land Use and Circulation Element in January 2013 February 2014 contains community specific goals and design guidelines specific to the community of Santa Margarita. Community vision and the expectations of residents and businesses in the community are also factors that may influence the final determination of land use compatibility. That determination will be made by the Planning Commission and/or the Board of Supervisors.

Throughout this EIR, the consistency of the proposed quarry with various plans and policies is summarized in each section. Those results, along with the following discussions provide the information upon which the determination of land use compatibility will be made. The applicant has proposed several measures – noted as “Applicant Proposed Measures” or APMs – that are intended to reduce the potential for incompatibility, particularly with respect to the Santa Margarita community. These are summarized at the end of this subsection.

The proposed surface mining operation is located north of both state Route 58 and the Coastal Branch of the California Aqueduct, approximately 3 miles northeast of the unincorporated community of Santa Margarita in San Luis Obispo County, California. In general, moderately steep to steep terrain dominates the vacant proposed quarry site with slopes ranging from 15 to 75 percent.

The quarry site is located less than one half mile east of the Salinas River. Moreno Creek is south of the site on the opposite side of SR 58; Moreno Creek connects to the Salinas River southwest of the site. The proposed quarry site is largely surrounded by undeveloped vacant land and some scattered large lot residential parcels, with the Hanson Aggregate granite quarry located less than one-half mile northwest of the site and scatter rural residential development to the south and southeast of the project site.

The historic community of Santa Margarita, three miles southwest of the project site, is envisioned to remain as a rural small town. As outlined in Section 4.11 of this EIR, present and future truck traffic through Santa Margarita presents land use compatibility issues for this community.

Through the downtown area of Santa Margarita, the highway consists of two 12-foot-wide travel lanes within a right-of-way that is up to 100 feet wide. There is a striped center left turn lane for three blocks between Murphy and Pinal Avenues. State Route 58 through Santa Margarita is classified as a Principal Arterial intended to carry traffic on trips connecting population centers in the Circulation Element of the Salinas River Area Plan (San Luis Obispo County 2009a:page 5-4).

4.14.2 San Luis Obispo County Plans and Policies

Table 4.14-1 presents a preliminary review of Plans and Policies of the San Luis Obispo County General Plan that are applicable to Land Use issues relative to this proposed surface mining operation.

4.14.3 Regulatory Setting

The property is within the County's Las Pilitas Planning Area (see Figure 4.14-1) and is designated as Rural Lands in the Las Pilitas Planning Area Rural Land Use Category Map (San Luis Obispo County 2010). All of the area proposed to be mined, and much of the remaining property, is covered by the EX1 Energy and Extractive Resource Area Combining Designation in the Las Pilitas Planning Area Rural Combining Designation Map (San Luis Obispo County 2009b), which is placed over a large portion of the Las Pilitas Planning Area. This Combining Designation recognizes the California Department of Conservation classification of the area as MRZ-2, which means that the State Geologist has identified these areas as containing significant deposits of aggregate material as explained in the Las Pilitas Area Plan (San Luis Obispo County 2003:page 6-1). The project design and reclamation plan will be reviewed to determine compliance with the statute and regulations of the California Surface Mine and Reclamation Act (SMARA, found at 2 PRC 2710, and 14 CCR 3500) and with the County requirements found in Chapter 22.36 of the County Code. These codes require the stockpiling and reuse of topsoil and vegetative matter, stabilizing final slopes with benching and contouring, and the phased reclamation and revegetation as final slopes are reached.

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**TABLE 4.14-1
POLICY CONSISTENCY ANALYSIS – LAND USE**

Source	Policy Statement	Discussion	Preliminary Determination
COSE Policy BR 2.3 Habitat Conservation Plans	The County will continue to collaborate with local agencies, landowners, and nonprofit organizations to fund and prepare habitat conservation plans (HCP) for federally listed species. The County should collaborate with RCDs, the NRCS, and other organizations to fund collaborative conservation planning to conserve habitats.	The North San Luis Obispo County Habitat Conservation Program (NSLOC) is not yet adopted; however, its proposed boundaries are more than 4.7 miles away from the project site, and would therefore not be affected by the project.	Not applicable
COSE Policy MN 2.1 Protect Mineral Resources	Protect mineral and aggregate resources from incompatible uses in designated areas likely to contain significant mineral deposits in order that such deposits may be available for future use. Extract in-stream aggregate materials in a sustainable manner that balances the rate of extraction with the rate of natural replenishment.	Application of the EX1 Energy and Extractive Resource Area Combining Designation will protect existing resource extraction operations from encroachment by incompatible land uses that could hinder resource extraction.	Potentially Consistent
COSE Policy MN 2.2 Incompatible Development	Protect existing resource extraction operations from encroachment by incompatible land uses, land use category changes, and land divisions that could hinder resource extraction.	Once the quarry is established, application of the EX1 Energy and Extractive Resource Area Combining Designation will protect existing resource extraction operations from encroachment by incompatible land uses that could hinder resource extraction.	Potentially Consistent
Framework for Planning (Principle 1, Policy 1)	County policy to protect a living environment that is safe, healthful, and pleasant.	The project will generate substantial noise at the project site, and project related truck traffic will affect the Community of Santa Margarita.	Potentially Inconsistent

Note: additional General Plan references are presented in other Sections of this EIR.

4.14.4 Assessment Methodology

After preparation of the Initial Study and during work on this EIR, detailed reviews of various planning and policy documents were conducted as part of the analysis of environmental effects of the project. Those reviews are summarized in the policy consistency analysis tables in each section. Other County departments and outside agencies were also

consulted with respect to their responsibilities and policies. These included the County Department of Public Works, Caltrans, the Air Pollution Control District, and others.

Community input included comments provided during the EIR scoping process. Throughout this process, several potential inconsistencies with agency plans and policies have been identified.

4.14.5 Compatibility Criteria

The determination of consistency with plans and policies is within the authority of the decision makers (e.g., Planning Commission, Board of Supervisors) as part of their review and consideration of the project. The determination will ultimately be reflected in an action and adoption of findings associated with the use permit. With appropriate consideration of the significance criteria presented in Appendix G of the CEQA Guidelines, the County of San Luis Obispo has developed and adopted the following criteria to determine project consistency with respect to various Land Use plans and policies, and compatibility with surrounding land uses:

- a. Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, Etc.) adopted to avoid or mitigate for environmental effects; and/or
- b. Be potentially inconsistent with any habitat or community conservation plan; and/or
- c. Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project; and/or
- d. Be potentially incompatible with surrounding land uses.

4.14.6 Applicability of Significance Criteria

With regard to Criteria “a” and “c,” these environmental issues are collectively addressed in the other respective Chapters of Section 4 of this EIR. With regard to habitat or conservation plans cited in Criterion “b,” the County of San Luis Obispo and the City of Paso Robles have initiated the development of a multiple species habitat conservation program for the north and eastern portions of the County (NSLOC). The goal is to prepare a Habitat Conservation Program in support of Federal and State permitting processes. The NSLOC is not yet adopted; however, its boundaries are more than 4.7 miles away from the project site, and would therefore not be affected by the project. No other habitat or community conservation plans are currently proposed or in effect that would be applicable to the project site.

In summary, this Land Use analysis focuses on compatibility with surrounding land uses, Criterion “d.” The discussion is presented in two parts. First, the compatibility of the quarry project itself with its surrounding land uses is considered. Second, the compatibility of the

project-generated heavy truck traffic with uses and users along SR 58 and through Santa Margarita is discussed. The Applicant Proposed Measures and Voluntary Measure are intended to improve compatibility in this respect, are presented at the end of this second discussion.

Compatibility with Land Uses immediately adjacent to the Project Site

The proposed quarry is within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 4.14-1. As defined by the Land Use Ordinance, Section 22.14.050, this combining designation is used to identify areas of the county which the California Department of Conservation's Division of Mines and Geology has classified as containing or being highly likely to contain significant mineral deposits. The purpose of this combining designation is to protect existing resource extraction operations from encroachment by incompatible land uses that could hinder resource extraction.

The project is a new resource extraction operation proposed in area containing a mix of existing uses. Some of the existing uses, such as the rural residential uses, may not be compatible with a new resource extraction operation. Surrounding uses are illustrated on Figure 4.14-1, and summarized in Table 4.14-2.

Site specific environmental issues related to the proposed mining activities, such as noise, parking, traffic, dust control, etc. have been appropriately addressed, and these issues are presented in other sections of this EIR. While most of the impacts identified in this EIR can be mitigated, impacts related to aesthetic resources and noise at and in the vicinity of the project site have been determined to be significant and would contribute to a potential incompatibility with surrounding uses.

Compatibility with Land Uses in the Santa Margarita Community

Truck traffic generated from the quarry will pass through the residential neighborhood along Camino Estrada and through downtown Santa Margarita along State Route 58, and compromise the small town, rural character of this historic community. Strong concerns have been expressed by residents near the proposed quarry, along the truck route through Santa Margarita and from within other parts of Santa Margarita and the surrounding areas. While a number of issue areas were identified, many voiced specific concerns regarding the type and number of truck trips generated by the project that would pass near Santa Margarita Elementary School and through the downtown area.

**TABLE 4.14-2
COMPATIBILITY WITH SURROUNDING AREA**

Adjacent Properties	Existing Land Uses	Future Land Use Categories, per County General Plan	Discussion
North	Vacant land, grazing	Rural Lands/EX1 Extractive Resource Area Combining Designation	Large lots and adherence to the EX1 Extractive Resource Area Combining Designation will ensure compatibility if these properties are developed in the future.
South	Several rural homes on Parkhill Road and SR 58	1. Rural Lands/EX1 Extractive Resource Area Combining Designation 2. Residential Rural	Combination of: distance; retention of ridgelines; and operational restrictions may reduce incompatibility of the quarry to the existing and future residential development south of the project, but impacts (Noise) would still result.
East	Vacant land, grazing, rural home on SR 58	1. Rural Lands/EX1 Extractive Resource Area Combining Designation 2. Residential Rural	Combination of: distance; retention of ridgelines; and operational restrictions may reduce incompatibility of the quarry to the existing and future residential development south of the project, but impacts (Noise) would still result. Large lots and adherence to the EX1 Extractive Resource Area Combining Designation will ensure compatibility if vacant properties develop in the future.
West	Vacant land, grazing, Hanson Quarry	Rural Lands/EX1 Extractive Resource Area Combining Designation	Large lots and adherence to the EX1 Extractive Resource Area Combining Designation may ensure compatibility if these properties develop in the future.

Santa Margarita Community Plan and Santa Margarita Design Plan. This additional truck traffic would be potentially inconsistent with community preferences, which are presented in the ~~Public Review Draft~~ Santa Margarita Community Plan (San Luis Obispo County, ~~January 2013~~ February 2014). In addition, following are excerpts from the adopted Santa Margarita Design Plan that illustrate the existing and desired character of the Santa Margarita community:

I-B. Vision for Santa Margarita

People in Santa Margarita enjoy a rural small town with shaded walkways, landscaped yards and an active, attractive downtown...An enlivened downtown and business corridor appear consistent with the community's historical character...Increasing numbers of residents and visitors enjoy the street scene in downtown throughout the day and into the evening. Through the downtown, the pavement of El Camino Real is narrower, occupied by wider sidewalks and split by a landscaped median that provides safer pedestrian crossings. Canopies of trees within

wider sidewalks, bulb-outs and the median define and enclose the street and improve traffic and pedestrian safety.

C. Goals of the Design Plan

2. Plan a circulation pattern for pedestrians, bicyclists and vehicles with safe and pedestrian-friendly routes for traveling within the community.

D. Key Issues and Opportunities

El Camino Real (SR 58)...Rather than taking such measures as re-locating the state highway out of town, people would prefer slowing traffic and making the street more pedestrian-friendly...

Estrada Avenue/SR 58. SR 58 south of the railroad to the edge of the community appears to lack sufficient paved width for bicycles, shoulders for pedestrians, and safe street crossings, particularly at H Street. As a school crossing, this intersection is considered unsafe for pedestrians and vehicles.

Although most identified traffic impacts can be mitigated (see Section 4.11), the passage of heavy trucks through the Santa Margarita community is potentially inconsistent with the goals of the design plan, and was also mentioned in comments received during the scoping period for this EIR. The truck traffic generated from the proposed quarry (273 daily trips, on average) could compromise the desired rural character of the Santa Margarita community, as expressed in the adopted Santa Margarita Design Plan.

Land Use Ordinance (Title 22). The Land Use Ordinance requires specific findings to be made, in regards to community character and compatibility, by the decision making body upon the approval of any conditional use permit. These findings include (Section 22.62.060):

C. Conditional Use Permits approval or disapproval

- 4. Required findings.*** *The Review Authority shall not approve or conditionally approve a Conditional Use Permit unless it first finds that:*
 - a. The proposed project or use is consistent with the Land Use Element of the General Plan; and*
 - b. The proposed project or use satisfies all applicable provisions of this Title; and*
 - c. The establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied in the particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be*

detrimental or injurious to property or improvements in the vicinity of the use; and

- d. That the proposed project or use will not be inconsistent with the character of the immediate neighborhood or contrary to its orderly development; and*
- e. That the proposed use or project will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project; and*
- f. Any additional findings required by planning area standards in Article 9 (Community Planning Standards), combining designation (Chapter 22.14), or special use (Article 4).*

Additional information that may be considered in formulating the required findings is presented in the next few paragraphs.

Truck traffic will occur only on SR 58, a state-owned and maintained highway. As such, the County has no authority to limit truck trips along this route. SR 58 passes directly through the “business district” of the community of Santa Margarita, and within close proximity of the Santa Margarita Elementary School, which is located off H Street, approximately 0.25 mile from SR 58. Children walking to and from school regularly cross SR 58 via a designated crossing at the intersection of SR 58 and H Street. The crossing is striped and marked with signage in accordance with Caltrans standards for School Area Pedestrian Safety (Caltrans 1996), and includes several other safety features. School zone speed limits are posted and enforced in the area, and a driver feedback sign has been installed for northbound traffic. The crossing is monitored by school crossing guards during drop-off and pick-up times, and Caltrans and the County recently installed a manually-operated flashing beacon light on either side of the crosswalk.

Currently, large trucks regularly travel through the downtown center of Santa Margarita. This is a historically-relevant area featuring small, locally-owned businesses on either side of the highway. Local businesses include restaurants and antique stores, a post office, feed store, a mercantile, and a gas station. The Santa Margarita Volunteer Fire Department is also located on this stretch of SR 58. There is only one designated crosswalk across SR 58 in the downtown area, at the intersection with Encina Avenue. However, the posted speed limit through the downtown area is 35 miles per hour, and this portion of the highway is wide and straight with long sight distances. A center turn lane also runs the length of the highway through most of the downtown. Large truck traffic along this stretch is common, due to the existence of a local trucking company and a truck repair operation, as well as trucks servicing the nearby Hanson quarry and other business. Passenger trucks hauling livestock trailers are also common along this stretch due to the rural and agricultural nature of the area.

**FINAL EIR OSTER/LAS PILITAS QUARRY
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In general, large trucks have the effect of slowing down passenger vehicles in the area. Maximum aggregate production from the Las Pilitas Quarry shall be limited to 500,000 tons of aggregate per year, which will limit the number of trucks that will travel the haul route servicing the quarry. Based upon traffic studies performed as a part of this EIR, this will equate to a 7 percent increase in current traffic during peak hours (please see the Transportation & Circulation Chapter (4.11) of this EIR). While there is no identified significant traffic safety impact based on measurable safety thresholds (e.g., sight distance, prevailing speed, etc.), the traffic associated with the proposed quarry may create a land use incompatibility and may not be consistent with the character of the community.

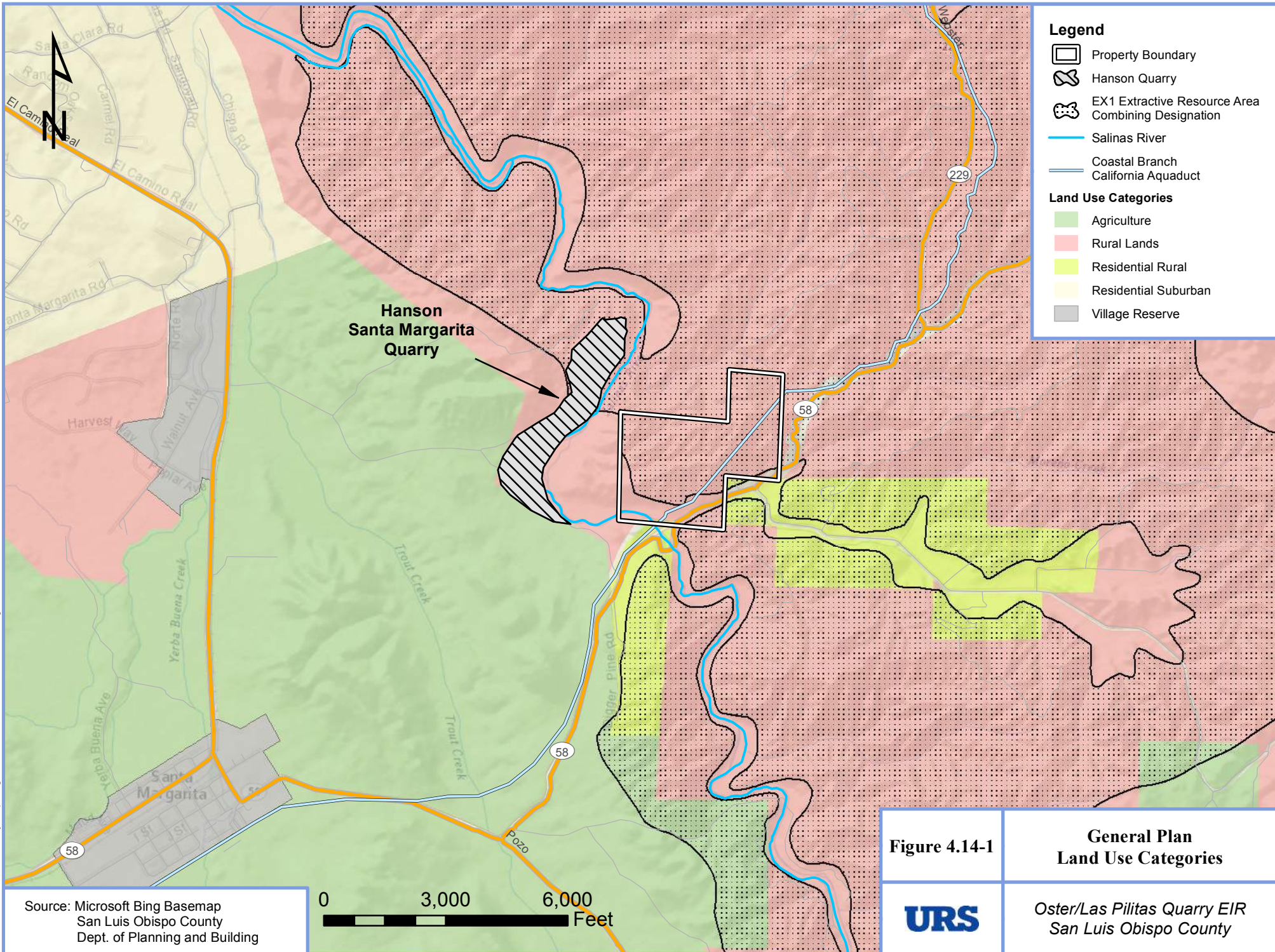
The Noise Chapter (4.8) of this EIR also identified significant impacts to surrounding residents as a result of quarry operation and blasting noise, and significant impacts to residents in the community of Santa Margarita along the truck route, due to the increase in truck noise. The specifics of this issue are dealt with in the Noise chapter, but it contributes to the incompatibility with surrounding uses and also will need to be considered by the decision makers in their review of the project and adoption of the findings discussed above.

In response to the concerns of the community regarding this issue, the applicant has proposed a number of measures to reduce potential traffic conflict (“Applicant Proposed Measures” or APM). These measures will be considered by the decision makers in their consideration and review of the project, and the determination regarding consistency with applicable plans and policies, and compatibility with surrounding uses.

Description of Issue	Applicant Proposed Measure
<p>Compatibility with Land Uses in the Santa Margarita community. Truck traffic from the project has the potential to be incompatible with surrounding land uses that generate pedestrian traffic, such as the Santa Margarita Elementary School and the downtown business district.</p>	<p>APM LU-1: Compatibility with Land Uses in the Santa Margarita community.</p> <p>APM/LU-1a: Prior to any commercial production or sales at the quarry, the Applicant shall prepare and submit a Traffic Control and Management Plan (TCMP) which be updated and resubmitted annually no later than July 1 of each year. The TCMP shall ensure that trucks arriving at or leaving the quarry reduce conflicts with peak pick-up and drop-off and bus arrival/departure times at Santa Margarita Elementary School, and also that truck traffic will not be active on the day of the annual Wildflower Ride. The Applicant shall obtain school start and end times from the Atascadero School District prior to July 1 of each year and shall coordinate with the San Luis Obispo Bike Club to determine the date of the Wildflower Ride for each year.</p> <p>APM/LU-1b: The Applicant shall be responsible for funding the installation of a motion-generated flashing light system to be embedded in the crosswalk at the intersection of SR 58 and H Street, subject to authorization by Caltrans and in accordance with Caltrans standards.</p> <p>APM/LU-1c: All trucks hauling in and out of the project shall be required to abide by posted speed limits at all times and keep at 25 mph or less through the designated school zone. All drivers visiting the quarry must be provided with a printout advising them to obey these speed limits and</p>

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Description of Issue	Applicant Proposed Measure
	<p>use extra caution when driving through the school zone and the downtown area and advising them that the use of engine brakes is prohibited in these areas except in emergency situations.</p> <p>APM/LU-1d: The Applicant shall establish a toll-free telephone hotline which members of the public may use to report any trucks or drivers that were observed exceeding the speed limits or driving unsafely. The Applicant shall investigate all reports, and shall take appropriate corrective and disciplinary action to prevent any further incidents. The Applicant shall provide a two-way radio or other communication device to the school crossing guards or school authorities so that they may directly contact the quarry or the scale house to report any incidents as they happen.</p>



**FINAL EIR OSTER/LAS PILITAS QUARRY
EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15 EFFECTS THAT ARE LESS THAN SIGNIFICANT

The County of San Luis Obispo conducted a preliminary analysis of the project's impacts through the Notice of Preparation (NOP) process, which was supported by an Initial Study. The NOP and associated Initial Study, dated July 1, 2010, and NOP response letters are included as Appendix A of the EIR. Through the NOP process, the County of San Luis Obispo determined that there was no substantial evidence that the development pursuant to the Conditional Use Permit and Reclamation Plan would cause or otherwise result in significant environmental effects in the resource areas discussed below. In addition, the analysis conducted for this EIR resulted in conclusions that certain impacts were less than significant.

No further environmental review of these issues is necessary for the reasons summarized in the following discussion.

4.15.1 Cultural Resources

Reasons Why Effects Were Not Found Significant

The project is located in an area historically occupied by the Obispeno Chumash and Salinan. According to the County's Notice of Preparation/Initial Study, the project is located in an area that is considered culturally sensitive due to presence of physical features typically associated with prehistoric occupation (i.e., permanent water source). A Phase I (surface) survey was conducted (Heritage Discoveries, Inc., April 16, 2009), which indicated that there was no evidence of cultural materials on the property within the project activity areas. This report has been reviewed and been determined to have been prepared in conformance with County standards. The County, for the purpose of this analysis has adopted the conclusions. No historic structures are present and no paleontological resources are known to exist in the area. Due to the steepness of the terrain affected by the proposed quarry, the likelihood of major cultural resources being present is very low.

The County of San Luis Obispo General Plan, Conservation and Open Space Element (COSE), Implementation Strategy CR 4.4.1 in Chapter 4 states:

"In areas likely to contain Native American and cultural resources, include Native Americans in tasks such as Phase I, II, and III surveys, resource assessment, and impact mitigation. Consult with Native American representatives early in the development review process and in the design of appropriate mitigations. Enable their presence during archaeological excavation and construction in areas likely to contain cultural resources."

This policy and the COSE were adopted in 2010, and the County is pursuing this policy of early involvement with Native American representatives in the conduct of Phase I surveys for work done after this date.

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4.15.2 Population and Housing

Reasons Why Effects Were Not Found Significant

Existing structures on the larger property that includes the proposed quarry site include a barn, storage shed, shop/garage, a trailer and two single residential structures, all located towards the southern boundary of the site off of SR 58. These structures are limited in number, and support the existing residences and ranch uses located there. They will not be affected by the quarry. The project will not induce growth in the area (as described further in Section 7.1 of this EIR). It will not displace or affect the existing residences on the property. The number of proposed employees is small (~~three to five~~ less than 10), and will not lead to a substantial demand for housing in the area. Energy use is not expected to be excessive (described further in Section 7.2). For these reasons, the project effects relative to population and housing will be less than significant, as described in the IS/NOP.

4.15.3 Scenic Vistas/Salinas River Trail (Impact AES-2)

Reasons Why Effects Were Not Found Significant

Although the project will create graded slopes into natural hillsides in the general vicinity of the proposed Salinas River trail corridor, those views will be blocked by existing vegetation and intervening topography.

4.15.4 Loss of Agricultural Land (Impact AG-1)

Reasons Why Effects Were Not Found Significant

The project involves the direct conversion of 1.2 acres of grazing land and loss of access to an additional 0.9 acre. These are relatively small areas and the current agricultural use is of low intensity.

4.15.5 Cumulative Effects Related to Agricultural Resources (Impact AG-4)

Reasons Why Effects Were Not Found Significant

Countywide, there was a loss of 5,840 acres of agricultural land from 2006 to 2008 (FMMP). The proposed project would result in a loss of approximately 2.1 acres of grazing land which is relatively small in size and is generally of low productivity. This loss does not contribute a considerable or significant proportion of the total agriculture land in the County or of the loss of agricultural land over time. With proper implementation of best use practices and mitigation measures, the impacts related to the introduction of invasive species would be considered less than significant.

**FINAL EIR OSTER/LAS PILITAS QUARRY
EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15.6 Emissions of Criteria Pollutants ROG, NO_x and PM₁₀ Fugitive Dust

Reasons Why Effects Were Not Found Significant

The San Luis Obispo County Air Pollution Control District (APCD) is the local agency working to protect the health of over 269,000 county residents by preserving good air quality. By partnering with the local communities and businesses APCD implements regulations and programs to reduce air pollution and assists the County in reaching all outdoor air quality standards.

The San Luis Obispo County Air Pollution Control District (APCD) has indicated both on-site and off-site mitigation of air quality impacts (including NO_x+ROG, as well as PM₁₀) can and will be incorporated into the project, to reduce the project emissions below a level of significance. According to Gary Arcemont, Air Quality Specialist for the San Luis Obispo County Air Pollution Control District, and based on the agreement reached between the applicant and APCD, the District recommends that the conclusions in the EIR relative to Impact AQ-1a (relating to NO_x+ROG) and Impact AQ-1b (relating to PM₁₀ Fugitive Dust/particulate matter emissions) should be considered “significant but mitigable.”

The County of San Luis Obispo, as Lead Agency defers to the technical and policy expertise of the San Luis Obispo County Air Pollution Control District, and agrees with the recommendations of the District, as a Responsible Agency.

4.15.7 Emissions of Other Criteria Pollutants (CO and SO₂) (Impact AQ-1c)

Reasons Why Effects Were Not Found Significant

As a general practice, CO concentrations are of concern at high volume roadway intersections that operate at a very congested level of service, or in association with confined areas such as tunnels or parking garages as noted above. Neither of those conditions is associated with the proposed project. For these reasons, CO emissions from blasting are considered less than significant.

The SLOAPCD (2012: Table 3-2) does not provide any standards for SO₂ emissions, and this pollutant is not discussed in the SLOAPCD CEQA Handbook other than its listing in the table of AAQS. Federal and state regulations have already been established to reduce the sulfur content of diesel fuel. This pollutant has not been considered a problem in the County. For these reasons, SO₂ emissions will not represent a significant impact.

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EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15.8 Creation of Objectionable Odors (Impact AQ-3)

Reasons Why Effects Were Not Found Significant

The project proposes to surface mine granitic rock and produce aggregate products for sale. The project will also accept and process “Type A” inert debris, consisting of Portland Cement Concrete and Asphaltic Concrete, to produce recycled material for use in roadway construction. These materials and activities are not expected to generate substantial odors detectable outside the project boundaries.

4.15.9 Consistency with Clean Air Plan (Impact AQ-4)

Reasons Why Effects Were Not Found Significant

The project involves activity and the generation of truck traffic that is consistent with regional growth forecasts and traffic modeling used in air quality planning, and the project is not growth inducing. Therefore, it is consistent with the Clean Air Plan.

4.15.10 Cumulative Effects Related to Air Quality (Impact AQ-5)

Reasons Why Effects Were Not Found Significant

There are no significant projects, other than the Hanson Santa Margarita Quarry, that are within one mile of the project site (note: this distance is consistent with Section 1.5(h) of the SLO County APCD CEQA Air Quality Handbook), which would warrant consideration for cumulative effects.

4.15.11 Effect on Wildlife Movement (Impact BIO-10)

Reasons Why Effects Were Not Found Significant

The Quarry project is designed such that it will not impact landscape level movement of large mammals, migratory birds or other wildlife.

4.15.12 Cumulative Effects Related to Biological Resources (Impact BIO-11)

Reasons Why Effects Were Not Found Significant

The loss of approximately 41 acres of habitat from this region does not, by itself, constitute a cumulatively considerable biological impact, due to the quantity of surrounding habitat in the region surrounding the Project Site. The Project Applicant proposes the permanent preservation of about 69 acres of undeveloped land on-site, as mitigation for the loss of Native Habitats. The on-going operations of Hanson Quarry within one mile of the proposed project do not require an increase in the amount of habitat being preserved within the Oster

**FINAL EIR OSTER/LAS PILITAS QUARRY
EFFECTS THAT ARE LESS THAN SIGNIFICANT**

Quarry site. Additionally, implementation of a phased reclamation plan upon completion of the quarry operations would restore and replace some of the habitat value and function that was lost during construction and operations of the facility. When the site ceases to be used as an active quarry, the area should have moderate value as a natural area.

4.15.13 Exposure to Geologically Hazardous Conditions (Impact GEO-2)

Reasons Why Effects Were Not Found Significant

The proposed quarry site is not in a location affected by an Alquist-Priolo fault zone, expansive soils, or a 100-year floodplain.

4.15.14 Policy Consistency and Effects on Future Mining (Impact GEO-5)

Reasons Why Effects Were Not Found Significant

The project design also includes the preservation of about 69 acres within a conservation easement intended as mitigation for the biological impacts of the project. This easement would preclude future mining on this portion of the Oster property, but it would not affect the potential for mining granitic rock on nearby properties. To the extent that the conservation easement prevents future residential uses in this area, it may tend to reduce the potential for land use conflicts with future mining on adjacent properties.

4.15.15 Cumulative Effects Related to Geology (Impact GEO-6)

Reasons Why Effects Were Not Found Significant

Some effects related to geology could be cumulative in nature. These effects include the loss of topsoil through erosion and the discharge of sediment into surface water courses. These effects may be associated with any proposed quarry, or with any other type of development or even with a change in agricultural activities. For these issues, permit requirements and existing statewide programs provide measures that serve to avoid or minimize the potential cumulative effects on a project-by-project basis.

4.15.16 Greenhouse Gas Generation (Impact GHG-1)

Reasons Why Effects Were Not Found Significant

The greenhouse gas emissions generated from the Quarry project do not exceed the Screening Threshold (10,000 MTCO₂e/year) established for evaluating these emissions.

**FINAL EIR OSTER/LAS PILITAS QUARRY
EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15.17 Potential Greenhouse Gas Plan Conflicts (Impact GHG-2)

Reasons Why Effects Were Not Found Significant

The Quarry project is consistent with the applicable Greenhouse Gas Emission policies of the Open Space and Conservation Element of the County General Plan. No conflicts are anticipated.

4.15.18 Cumulative Effects Related to GHG Emissions (Impact GHG-3)

Reasons Why Effects Were Not Found Significant

The greenhouse gas emissions generated from the Quarry project are negligible even when combined with the emissions from the Hanson Quarry. Both quarry projects are strategically co-located within the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Notwithstanding the size of this area, these two mines are effectively located near future development within the County, such that extensive importation of quarry materials from outside the region can be minimized. The resulting reduction of truck traffic and corresponding greenhouse gas reduction can also be expected.

4.15.19 Effect on Regional or Local Evacuation Plans (Impact HAZ-3)

Reasons Why Effects Were Not Found Significant

The Project is not expected to conflict with any emergency response or regional or local evacuation plans. The project will have its own dedicated access drive from SR 58, which will not affect access to either of the two residences located elsewhere on the property, or any other residences in the vicinity. Emergency response is provided by the CalFire/County Fire Station No. 40 on Parkhill Road, approximately 1.5 miles southeast from the project site. The access drive for the project is designed to meet CalFire requirements.

4.15.20 Airport Flight Plans (Impact HAZ-4)

Reasons Why Effects Were Not Found Significant

The site is not located in an area under an airport master plan, airport land use plan or within two miles of an airport landing strip. The nearest commercial airports are in: San Luis Obispo (13 miles) and Paso Robles (18 miles). The nearest private airstrip is Bogdan Airport, approximately 2 miles east of the Quarry site. The proposed quarry will not involve any tall structures or activities that would interfere with aircraft operations in the vicinity. For these reasons, the proposed project would not expose people to a safety risk associated with airport flight patterns.

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EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15.21 Cumulative Effects Related to Hazards (Impact HAZ-7)

Reasons Why Effects Were Not Found Significant

All present and future granite quarries which transport, manage and handle explosive and hazardous materials are subject to applicable regulatory requirements that mitigate their potential impacts. All quarries and major construction projects are subject to fugitive dust control and worker safety measures that minimize the potential for major or widespread infections of Valley Fever.

4.15.22 Demand for Public Services (Impact PS-2)

Reasons Why Effects Were Not Found Significant

The project will contribute a small increment to demand for other public services, which can be provided by the appropriate public service providers (police, schools, roads and solid waste).

4.15.23 Cumulative Effects Related to Public Services and Utilities (Impact PS-3)

Reasons Why Effects Were Not Found Significant

Public facility fee programs (Title 18 of the San Luis Obispo County Code), and school fee programs (State Government Code 65995 et seq.) have been adopted to address this impact along with implementation of Section 22.36.110 of the Land Use Ordinance which requires payment of fees to the County Public Works Department for impacts to County roads.

4.15.24 Increase Use or Demand for Recreational Facilities (Impact REC-1)

Reasons Why Effects Were Not Found Significant

The quarry project will not increase population nor provide any new housing, and will not increase the demand for recreational facilities.

4.15.25 Cumulative Effects Related to Recreation (Impact REC-3)

Reasons Why Effects Were Not Found Significant

All present and future granite quarries, as well as future discretionary development in the Salinas River trail corridor region, will be subject to development review and implementation of County policies and requirements that would avoid fragmentation of the Salinas River Trail and effects on recreational resources opportunities along the river.

**FINAL EIR OSTER/LAS PILITAS QUARRY
EFFECTS THAT ARE LESS THAN SIGNIFICANT**

4.15.26 Traffic Volume Increases – LOS (Impact TRAFFIC-1b)

Reasons Why Effects Were Not Found Significant

The project will cause small increases in the traffic delay at intersections in the project vicinity, and on the traffic density on US Highway 101 and the SR 58 freeway ramps. In all cases, these changes will not alter the existing Level of Service (LOS) and in all cases the existing LOS is within applicable standards.

4.15.27 Cumulative Effects Related to Wastewater (Impact WW-2)

Reasons Why Effects Were Not Found Significant

As with the present quarry proposal, appropriate percolation test results and documentation of compliance with other County regulations related to installation of septic systems and leach fields will be required for future projects, prior to the issuance of permits associated with the on-site wastewater disposal system.

4.15.28 Increased Use of Surface Water (Impact WQ-3)

Reasons Why Effects Were Not Found Significant

The project will increase total water use on the property from approximately 2 afy to 7 afy. This amount is within the capacity of Well A, which is proposed to serve the project, and much lower than the available supply represented by the base flow in the Salinas River.

4.15.29 Effect on Community Water Service Provider (Impact WQ-4)

Reasons Why Effects Were Not Found Significant

The nearest water service provider is CSA 23 in Santa Margarita, which will not be affected by the project.

4.15.30 Cumulative Effects Related to Water Quality and Supply (Impact WQ-5)

Reasons Why Effects Were Not Found Significant

The project, in conjunction with the nearby Hanson Santa Margarita Quarry and other uses, will continue the use of surface and shallow subsurface water from the Salinas River. Based on the anticipated cumulative use and the pattern of topography and limited potential for development, the cumulative water use will be much less than the minimum flows in the Salinas River. Potential water quality effects from all future uses and development will remain subject to existing and future regulations.

**SECTION 4.0
ENVIRONMENTAL ANALYSIS**

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified through the Initial Study process as having the potential to experience significant impacts.

“Significant effect” is defined by the State CEQA Guidelines Section 15382 as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

**SECTION 5.0
CUMULATIVE EFFECTS SUMMARY**

5.1 INTRODUCTION

5.1.1 CEQA Guidance

Direction regarding the analysis of cumulative effects is found in Section 15064 and 15130 of the CEQA Guidelines. Section 15064 deals with the issue of cumulative effects in determining whether or not an EIR is necessary for a project and Section 15130 provides some guidance on how to evaluate and discuss cumulative effects. Depending on the issue, different approaches may be used in considering cumulative effects, as set forth in CEQA Guidelines Section 15130(b) (1). The first approach involves compiling a list of similar or nearby projects that are “...past, present, and probably future projects...” that should be considered based on “...the nature of the environmental resource being examined, the location of the project, and its type...” (Section 15130(b) (2)). The second approach relies on “...projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.” Both of these approaches are used in this EIR.

Regardless of which method is used, the point is to identify those issues or resources where the effects of the project would be considered “cumulatively considerable.” Although there is no quantitative or objective definition of this phrase in the CEQA Guidelines, project effects that are disproportionately large or which add to other projects and cause a numerical threshold to be exceeded are commonly considered to be cumulatively considerable. If a project-specific impact cannot be mitigated to a less than significant level, it might also be considered to contribute to a cumulative significant impact as well. Also, even if a project-specific impact is less than significant, it may contribute to a cumulatively significant impact and this result should be identified.

5.1.2 Initial Study/Notice of Preparation

The IS/NOP prepared for this project identified possible cumulative effects in the following issues:

- **Agriculture.** Cumulative effects may arise from indirect effects (such as transportation air pollution or the potential introduction of weeds) or from the direct conversion of land from its present use to the quarry and its addition to similar conversions in other areas.
- **Air Quality.** This issue is typical of those that are addressed through consideration of regional plans, the SLO APCD Clean Air Plan in this instance. Greenhouse gases and their contribution towards global climate change are related issues that are usually evaluated on a cumulative basis, rather than focusing on a single project.

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- **Public Services.** The IS/NOP (page 24) notes that cumulative effects on public services are usually addressed through the County impact fee program. The same discussion also notes the potential for cumulative effects on public roadways – and the need to address cumulative traffic.

This list is not exhaustive, and it was recognized that the EIR must address cumulative effects appropriately. This IS/NOP did conclude (page 32) that cumulative effects can and will be mitigated. In the analysis for this EIR, however, two cumulative impacts have been identified for which mitigation is not feasible. These are cumulative effects on aesthetics (views from the SR 58 corridor), cumulative traffic noise in the community of Santa Margarita, and cumulative traffic impacts due to the uncertainty of timing and other contributors to identified improvements. These effects are described in their respective sections in Chapter 4 of this EIR, and are summarized below along with the discussions of other cumulative effects found to be less than significant.

5.2 CUMULATIVE PROJECTS

The County Planning and Building Department maintains a listing of recently approved projects, and prepared a preliminary list of projects in the vicinity of the proposed quarry. This list was reviewed, updated, and augmented with information obtained from the City of Atascadero. The resulting list is shown in Table 5-1 below, and the project locations are shown in Figure 5-1.

The projects from Table 5-1 with the greatest potential to contribute towards significant cumulative effects are the Eagle Ranch Specific Plan and possible future development in the Santa Margarita Ranch. If developed, both of these projects would contribute substantial volumes of traffic affecting US Highway 101, and would have related effects on air quality. Traffic and air quality are both topics that involve regional modeling and planning, and their cumulative effects are discussed in the context of larger plans. Eagle Ranch is located west of US Highway 101 and would have less effect on traffic using SR 58 and little or no effect on lands and other resources in the project vicinity. A preliminary review of future development within Santa Margarita Ranch was provided in the EIR for the Agricultural Cluster development. In the traffic forecast used for future conditions, the Santa Margarita Ranch Agricultural Residential Cluster subdivision was considered, since it was approved, but the “Future Development Program” was not considered to be reasonably foreseeable since it was not approved.

The two solar photovoltaic projects listed are very large, but are located at a distance such that they do not contribute towards effects near the proposed quarry site. By the time the quarry is developed, the construction traffic from the solar plants will no longer affect SR 58, so they will have little or no additive effects.

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CUMULATIVE EFFECTS SUMMARY**

**TABLE 5-1
LIST OF PROJECTS CONSIDERED
IN CUMULATIVE EFFECTS ANALYSIS**

Project ID Number	Project Name (APN)	Description	Status
1	Eagle Ranch, City of Atascadero (many APNs)	3,450 acre Specific Plan; annexation to City; re-configuration of 452 existing residential lots, development of Village Center office and local retail uses, highway commercial uses at US Highway 101 and Santa Barbara Road, resort hotel, schools, roads, trails, open space and agricultural uses	Early 2012: Specific Plan and Draft EIR are under preparation and project is undergoing review by City through series of public workshops. Hearings for approval anticipated in 2013.
2	Church of the Nazarene (043-301-035)	Re-zone from Agriculture to Rural Lands and expansion of organizational camp to add 10,000 square feet of yurt clusters and an approximately 4,000 square foot dining room addition, with an increase of campers from 120 to 250.	Information hold
3	Hendrix MUP (070-093-017)	Temporary Events including: 10 events with no more than 300 attendees; 5 events with no more than 200 attendees; 5 events with no more than 150 attendees; and 8 events with no more than 125 attendees.	Information hold
4	Cully Parcel Map (069-044-005)	Four-lot parcel map (~9.5 acres)	Information hold
5	Johansen Parcel Map (059-241-021)	2 lot parcel map (~5 acres)	Approved
6	Wonsley Parcel Map (070-172-006)	2 lot parcel map (~42 acres)	Accepted
7	Ioppini Parcel Map (059-061-015)	2 lot parcel map with TDCs (~2.5 acres)	Approved
8	Volbrecht Parcel Map (059-181-064 /065)	2 lot parcel map with TDCs (~2.2 acres)	Recorded, not built
9	Galena Parcel Map (059-431-042)	2 lot parcel map with TDCs (~2.5 acres)	Recorded, not built
10	Barre Parcel Map (059-331-029)	2 lot parcel map (~2 acres)	Recorded, not built
11	Kelling Parcel Map (059-141-059)	2 lot parcel map with TDCs (~4.9 acres)	Recorded, not built
12	Burgett Parcel Map (059-141-053)	3 lot parcel map with TDCs (~5.4 acres)	Recorded, not built
13	Damon Parcel Map (070-191-057)	2 lot parcel map (~46 acres)	Recorded, not built

**FINAL EIR OSTER/LAS PILITAS QUARRY
CUMULATIVE EFFECTS SUMMARY**

**TABLE 5-1 (CONTINUED)
LIST OF PROJECTS CONSIDERED
IN CUMULATIVE EFFECTS ANALYSIS**

Project ID Number	Project Name (APN)	Description	Status
14	Dickerson Parcel Map (070-172-028)	2 lot parcel map (~47 acres)	Approved
15	Kregger Parcel Map (069-133-030)	4 lot parcel map	Approved
16	Santa Margarita Ranch	150 lot Ag Cluster, and future development to be determined.	Ag. Cluster Approved / Litigation.
17	Topaz Solar Farm and Tract Map	The project would allow for a 550 megawatt (MW) photovoltaic (PV) solar power plant over approximately 3,500 acres, within 19 properties (totaling approximately 7,182 acres, or approx. 9.9 square miles). The project also includes a Vesting Tentative Tract Map (Tract 3032) that creates one parcel of 320 acres from three legal parcels of 40, 40, and 80 acres each, and four 40-acre previous created parcels.	Approved 2011, under construction in 2012.
18	California Valley Solar Ranch (SunPower)	A request to establish a 250 megawatt (MW) photovoltaic power plant on 25 properties totaling approx. 4,685 acres. Related project (Twisselman Surface Mine) would provide aggregate for on-site road base only.	Approved 2011, under construction 2012.
19	Hanson Aggregates (Santa Margarita Quarry) Mining Area Expansion (070-141-054)	Request to amend the existing CUP and Reclamation Plan for the quarry operations to add an additional 45 acres to the mining area. No increases in maximum output levels, operating hours, or daily truck trips are proposed.	Application filed June 2012. NOP released by County for a Use Permit/ Reclamation Plan Amendment DRC2011-00098, 99
20	City of Atascadero, Dove Creek, PD-12 (ZCH 2003-0049)	Planned development for 279 dwelling units, east of US Hwy 101, north of Santa Barbara Road.	Approved 09-28-2004. As of March 2012, approx. 150 built or under construction. Remaining 129 dwelling units expected by 2017.

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CUMULATIVE EFFECTS SUMMARY**

**TABLE 5-1 (CONTINUED)
LIST OF PROJECTS CONSIDERED
IN CUMULATIVE EFFECTS ANALYSIS**

Project ID Number	Project Name (APN)	Description	Status
21	City of Atascadero, Las Lomas (Woodridge Specific Plan, SP-1, ZCH 2003-0041)	Specific Plan for 279 dwellings (100 apartments, 179 single family)	Approved 10-15-2003. As of March, 2012, approx. 50 built. 100 apartments pending and remaining 129 dwelling units expected by 2017.

Most of the remaining projects listed are small lot splits or parcel maps that do not involve significant effects.

5.3 SUMMARY OF CUMULATIVE EFFECTS

Each of the topical discussions throughout Section 4.0 of this EIR discusses cumulative effects. The degree of detail in each discussion varies depending on the issue and approach used in the evaluation. The most important cumulative effect is related to traffic, but future traffic improvements are expected to allow all roadway segments and intersections examined in this EIR to function at acceptable levels of service. With or without the project, traffic volumes are expected to increase along SR 58 to the point where a signal will be warranted at its intersection of Camino Estrada with El Camino Real. The proposed quarry will contribute towards this cumulative impact, and a proportional contribution towards mitigating that impact will be required.

The following sections summarize the cumulative impact discussions from the Section 4.0 topics.

5.3.1 Aesthetics and Visual Resources

The project is about one-half mile distance from the existing Hanson Santa Margarita Quarry. Both quarries are within the EX1 Extractive Resource Area Combining Designation, as shown on Figure 3-1. In this region, the EX1 Combining Designation is placed over the La Panza Granitics, a large area that is classified as MRZ-2 by the California State Geological Survey (1989:9). Since this Combining Designation is specifically intended to promote mineral extraction, it is reasonable to expect that future quarries will be approved and constructed in this area, and that an unspecified number of them will have graded areas and ultimately revegetated slopes that will have visual impacts similar to this proposed project, particularly when viewed from SR 58. Although the specific number and actual configuration

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of these future quarries is unknown at this time, cumulative effects relative to Aesthetics and Visual Resources are expected to be significant and not mitigable.

5.3.2 Agricultural Resources

Countywide, there was a loss of 5,840 acres of agricultural land from 2006–2008 (FMMP). The proposed project would result in a loss of approximately 2.1 acres of grazing land which is relatively small in size and is generally of low productivity. This loss does not contribute a considerable or significant proportion of the total agriculture land in the County or of the loss of agricultural land over time.

With proper implementation of best use practices and mitigation measures, the impacts related to the introduction of invasive species are considered less than significant. Given the lack of agricultural uses within the immediate vicinity of the project and with proper implementation of APCD procedures, the threat of dust damage from this project and other sources in the vicinity is considered less than significant.

5.3.3 Air Quality

Section 4.3 Air Quality reviews potential cumulative effects under IMPACT AQ-5. The following paragraphs summarize that discussion.

Guidance from the SLO APCD (2012:page 1-6), indicates that cumulative impacts for criteria air pollutants should be evaluated by combining the air quality impact from the project with all planned construction and development activities within one mile of the project.

The proposed Oster/Las Pilitas Quarry is about one-half mile in a crosswind direction from the existing Hanson Santa Margarita Quarry. The Hanson Santa Margarita Quarry has submitted a request to expand the allowable mining area but is not proposing any increase in production or changes to operation that would result in increased air emissions over the current operations according to the Notice of Preparation (NOP). Traffic originating at the Hanson Quarry will not increase as a result of their proposed project, and impacts associated transportation emissions from the proposed Las Pilitas Quarry along the haul routes are less than significant.

The only major foreseeable development in the general vicinity includes the completion of approved residential subdivisions in the southern portion of Atascadero (about 400 dwelling units) and the future development of the Eagle Ranch Specific Plan, in the southwestern portion of Atascadero. These locations are about 3.5 and six miles northwest from the project site, respectively. The Santa Margarita Ranch is closer; the approved Agricultural Cluster subdivision in that project is about two miles southwest from the project site. The remaining portions of the Santa Margarita Ranch property, referenced as the “Future Development

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Program” in the 2008 EIR for that project (San Luis Obispo County 2008:page 2-1), have not been approved for any development beyond continued agricultural and related uses. The extent of future land uses other than agriculture in this Future Development Program is not known; but this entire area is also much more than one mile from the project site. Thus, there are no significant projects, other than the Hanson Santa Margarita Quarry discussed above, that are within one mile of the project site (note: this distance is consistent with Section 1.5(h) of the SLO County APCD CEQA Air Quality Handbook), which would warrant consideration for cumulative effects.

With respect to Toxic Air Contaminants, and in particular Diesel Particulate Matter (DMP) from heavy truck exhaust which is a known carcinogen, the Health Risk Assessment performed for the air quality analysis determined that the maximum increase in cancer risk within the community of Santa Margarita was 1.9 in one million, well below the 10 in one million threshold for project specific analysis suggested by the SLOAPCD. Even if the existing truck traffic from the Hanson Quarry and from other quarries and transport businesses in the area were added up, the total increase in cancer risk along SR 58 through Santa Margarita would be approximately 4 in one million, still below the thresholds that could be used for cumulative analysis. Thus, the cumulative effect related to DMP and increased cancer risk is not a significant impact.

5.3.4 Greenhouse Gas Emissions

The project related impact related to greenhouse gas emissions is less than significant. Furthermore, the proximity of the Oster Quarry within one mile of the existing Hanson Quarry provides an appropriate cumulative impact study area for greenhouse gas emissions. The greenhouse gas emissions generated from the Quarry project are negligible even when combined with the emissions from the Hanson Quarry. This potential cumulative impact is less than significant.

5.3.5 Biological Resources

The proximity of the Oster Quarry within one mile of the existing Hanson Quarry provides an appropriate cumulative impact study area for biological resources. The loss of approximately 41 acres of habitat from this region does not, by itself, constitute a cumulatively considerable biological impact, due to the quantity of surrounding habitat in the region surrounding the project site. The applicant proposes the permanent preservation of about 69 acres of undeveloped land on-site, as mitigation for the loss of Native Habitats. The on-going operations of Hanson Quarry within one mile of the proposed project do not require an increase in the amount of habitat being preserved within the Oster Quarry site. The proposed Hanson Quarry expansion will be evaluated for its own biological effects, but that project will not alter the production rate, traffic generation, emissions or other factors that

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would increase indirect effects. For these reasons, the cumulative effects on biological resources are less than significant.

5.3.6 Geology

The project as designed, and with the listed mitigation measures applied to it, will not have any significant impacts related to geological constraints or resources. There are several other granite quarries in the region, and each is subject to applicable code requirements that work to reduce their adverse environmental and safety effects. As described in Section 3.1 of this EIR, the EX-1 Extractive Resource Area Combining Designation extends over 8,000 acres within the Las Pilitas Planning Area and also extends into the adjacent planning areas north and west. Given the extent of the granitic resources present, and the continuing demand for aggregate resources necessary to maintain highways and local roads, as well as for any new development, it is reasonable to anticipate future quarry proposals throughout the EX-1 area. For the most part, each of the geological constraints involved in the significance criteria used in this analysis is evaluated on the basis of the specific location of a project relative to the constraint or issue being analyzed. Thus, there are no additive or cumulative effects associated with a project's distance from the nearest active fault zone, or presence or absence of soils subject to expansion. Some effects, however, could be cumulative in nature. These include the loss of topsoil through erosion and the discharge of sediment into surface watercourses. These effects may be associated with any proposed quarry, or with any other type of development or even with a change in agricultural activities. For these issues, permit requirements and existing statewide programs provide measures that serve to avoid or minimize the potential effects on a project-by-project basis. In this way, significant cumulative impacts are avoided or minimized, and it is not necessary to identify additional requirements for any individual project. Cumulative effects regarding geology are less than significant.

5.3.7 Hazards and Hazardous Materials

There are several other granite quarries in the region which transport, manage and handle explosive and hazardous materials but each of these quarries are also subject to applicable regulatory requirements that mitigate their potential impacts. There are no additive or cumulative effects associated with the hazards or hazardous material at the site. Dust control measures and other recommendations to minimize the exposure of workers to Valley Fever are required at all major construction sites, quarries, and similar operations. These measures serve to minimize the potential for worker exposure to Valley Fever and the potential for any significant outbreaks or widespread infection from this disease.

In summary, the application of existing regulatory programs that address and control hazards and hazardous material that may be associated with the project, and with all similar projects, prevent these effects from having a significant additive or cumulative impact.

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5.3.8 Noise

Although the Hanson Santa Margarita Quarry is in the same general vicinity as the proposed project, it is located at a sufficient distance such that its noise effects are just barely audible along SR 58 and in the vicinity of the project (Dubink Associates 2010:13). For this reason, the most important cumulative noise effects related to the project are those involving roadway traffic noise. The project is expected to have a lifetime of at least 25 years or more, and will continue to generate truck traffic on area roadways as the surrounding communities and traffic volumes grow. In Section 4.8, IMPACT NOISE-5 provides details regarding the cumulative roadway noise effects, which are summarized in the following paragraphs.

In Santa Margarita the existing traffic conditions lead to Ldn values at residences close to SR 58 near the east and west end of the village in excess of 60 dBA. Future traffic growth, both with and without the proposed project, will cause Ldn values to increase and surpass 65 dBA, and the project traffic will contribute about 2 dBA to this impact. With these future noise levels, it will become increasingly difficult to provide exterior living areas with Ldn values below 60 dBA, and interior Ldn values may begin to exceed 45 dBA. This cumulative traffic noise impact is considered significant, and the project will contribute towards this impact.

Given the proximity of existing residential uses to SR 58 passing through Santa Margarita, it is not feasible to construct a wall or other noise barrier between the roadway and still maintain access to those lots with driveways along the roadway. Such a construction project would also be inconsistent with the design guidelines for the Santa Margarita village. Project generated truck noise can be reduced with a requirement that all trucks using the quarry be required to maintain mufflers (MM Noise-2a), but this cannot avoid the future noise impacts.

In summary, due to its separation from the existing Hanson Santa Margarita Quarry the proposed quarry is not expected to contribute to cumulative operational impacts. It will, however, contribute towards cumulative traffic noise impacts. Cumulative traffic noise will remain less than significant in the project vicinity, but will be significant and not mitigable at residential locations along SR 58 in Santa Margarita.

5.3.9 Public Services and Utilities

This project, along with others in the area, will have a cumulative effect on police and fire protection, and will not affect schools. The project's cumulative impacts are within the general assumptions of growth projected in this area. Accordingly, public facility (County) and school (State Government Code 65995 et seq.) fee programs have been adopted to address this impact, and will reduce the cumulative impacts to less than significant levels and no special mitigation is required. In addition, Section 22.36.110 of the County Land Use Code address the use of County Roads by Extraction Operations.

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5.3.10 Recreation

San Luis Obispo County Parks Department manages approximately 15,000 acres of parkland. Development of the larger Salinas River Trail system would have a positive recreational benefit. It may also have relatively minor adverse environmental effects associated with trail construction and increased human activity along the riparian corridor of the river. These types of effects are associated with all recreational trails and would have to be evaluated at the time when a specific trail alignment and design are formulated, which is when measures to minimize any adverse effects could also be identified.

The applicant is requesting an approval for a quarry that would have a life of at least 25 years (or longer) and without the offer of dedication could potential result in fragmentation of the Salinas River Trail for a minimum of 25 years. Without the offer of dedication, the project could potentially result in impacts to County trail systems, as would all projects on lands adjacent to the Salinas River. Through the planning and environmental review of projects in the region, however, and implementation of County policies and other requirements, the potential effects on the Salinas River corridor and trail system would be less than significant.

In summary, due to the non-residential nature of this quarry and the Hanson Quarry, and the offer of dedication required for the trail alignment, potential cumulative impacts to Recreation are less than significant.

5.3.11 Transportation and Circulation

Of the 21 future development projects anticipated in the region (see Section 5.3), Santa Margarita Ranch (Project ID# 16) is clearly the most notable – both in terms of its potential traffic effects within the community and because it is the only large private development that would be expected to contribute substantial funding towards major traffic improvements on area roads. The two major land development projects underway in the southern portion of the City of Atascadero (Dove Creek (Project ID# 20) and Las Lomas/Woodridge Specific Plan (Project ID# 21) will construct an additional 350 to 400 dwelling units in the next 5 to 10 years. These projects, however, will generate little southbound peak hour traffic through Santa Margarita since they both have more direct access to US Highway 101 via Santa Barbara Road. Development of the Eagle Ranch Specific Plan area (Project ID# 1) in southwestern Atascadero may start within that timeframe, but would not likely be completed for another 10 to 20 years. In any event, that project will affect US Highway 101, but would have little or no traffic effects on SR 58 since its access to and from US Highway 101 is farther north.

In order to mitigate cumulative Traffic impacts, the applicant/quarry operator shall enter into an agreement with the County to pay their fair share of future traffic improvements in Santa Margarita. MM TRAFFIC-4 in Section 4.11 includes more detail regarding this condition. Although the proposed mitigation would reduce impacts to the extent possible, due to the

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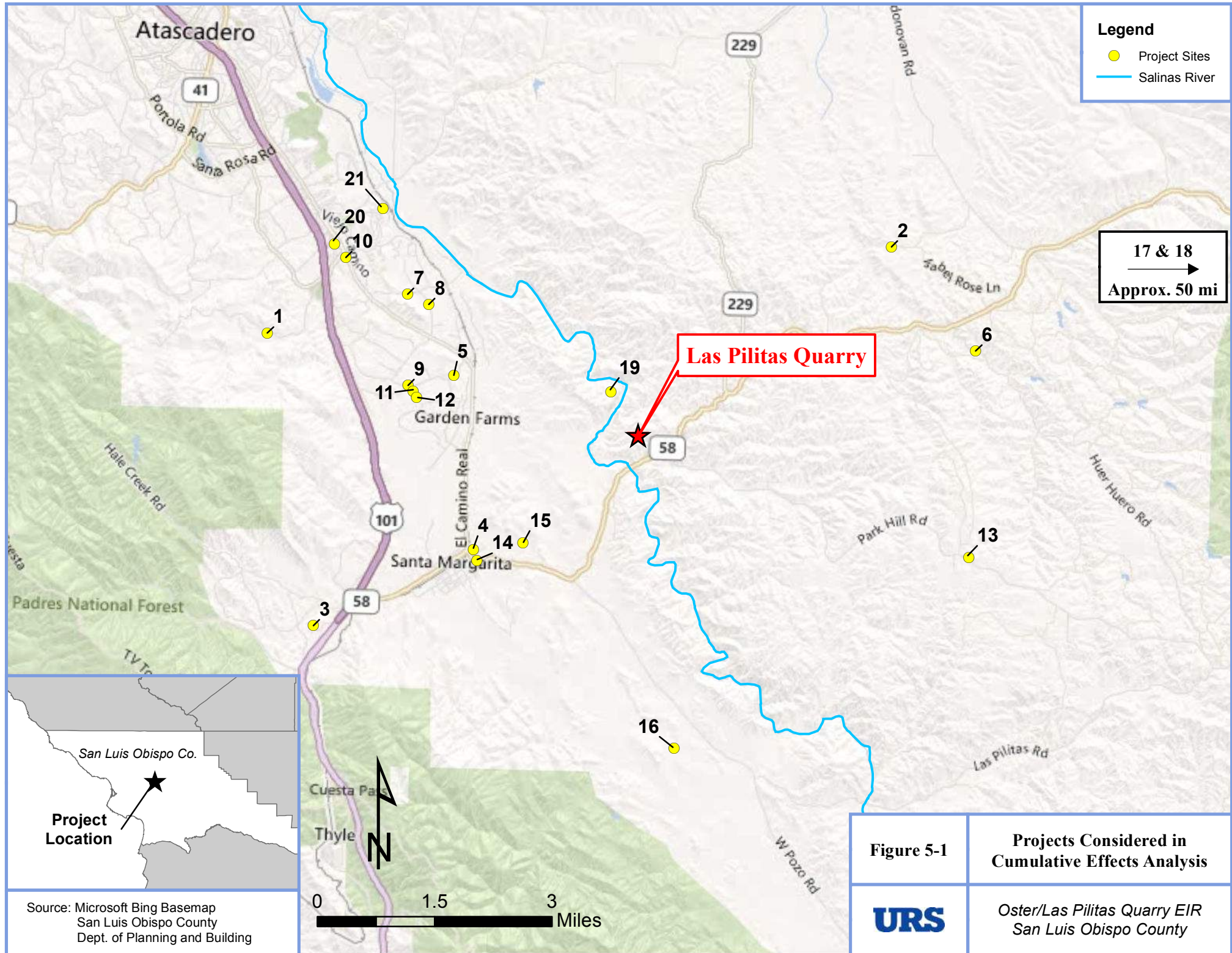
uncertainty regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, in cannot be assured that all improvements would be feasibly constructed prior to the time when they are needed. As a result, cumulative traffic impacts would remain significant and unavoidable.

5.3.12 Wastewater

No cumulative effects relative to wastewater were identified.

5.3.13 Water Quality and Supply

Cumulative effects related to groundwater use are well-documented for the Paso Robles groundwater basin within the upper Salinas River watershed. As discussed in Section 4.13, the project site is not within the Paso Robles groundwater basin, and would not affect it. The available riparian water supply associated with the Salinas River is adequate for the project and other foreseeable uses in the vicinity.



Legend

- Project Sites
- Salinas River

17 & 18
 →
 Approx. 50 mi

Las Pilitas Quarry

San Luis Obispo Co.

Project Location

Source: Microsoft Bing Basemap
 San Luis Obispo County
 Dept. of Planning and Building

0 1.5 3 Miles

<p>Figure 5-1</p>	<p>Projects Considered in Cumulative Effects Analysis</p>
<p>URS</p>	<p>Oster/Las Pilitas Quarry EIR San Luis Obispo County</p>

SECTION 6.0 PROJECT ALTERNATIVES

6.1 INTRODUCTION

In accordance with CEQA procedures, an EIR must discuss reasonable alternatives to the proposed project. The State CEQA Guidelines Section 15126.6(a) states:

Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

Additional language in the CEQA Guidelines provides more direction for identifying a reasonable range of alternatives, including the ability to reduce impacts and feasibility. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

6.2 BASIC PROJECT OBJECTIVES

The range of Alternatives presented in this Section relates to the project objectives for the Oster/Las Pilitas Quarry project. These basic objectives are presented in Section 1.0/Introduction and below, as follows:

- A. Develop significant mineral deposits in a manner that protects sensitive natural resources and existing adjacent uses, and is consistent with other County general plan goals and policies.
- B. Protect significant mineral resources from land uses that threaten their availability for future mining.
- C. Develop known ~~concrete-grade~~ aggregate reserves in the local production-consumption region in accordance with previous planning and coordination with California Department of Water Resources, state policy, the County EX1 Combining Designation and applicable regulations.

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- D. Provide an additional source of aggregate material in the region, with a permitted production of up to 500,000 tons/year for approximately 30 years, consistent with state policy, the County EX1 Combining Designation and applicable regulations, and in a manner that supports independent contractor and other local use.
- E. Contribute towards increased recycling of construction and demolition debris to help achieve an overall goal of 75 percent recycling for this type of waste material.
- F. Locate an ~~an concrete-grade~~ aggregate quarry as near as practicable to use areas in the San Luis Obispo-Santa Barbara Production-Consumption region, and with minimal reliance on local streets to gain highway and freeway access.

6.3 SIGNIFICANT EFFECTS OF THE PROJECT

The alternatives presented in this section were identified in response to the significant immitigable impacts identified for the proposed project, and presented in Section 4 of this EIR. These impacts are summarized as follows:

- **Impact AES-1: Scenic Vistas.** The project will create graded slopes into natural hillsides, which will be visible to the public from portions of the SR 58 corridor, which is identified for study as a scenic corridor by the Conservation and Open Space Element.
- **Impact AES-4: Cumulative Effects on Aesthetics and Visual Resources.** It is reasonable to expect that future quarries will be approved and constructed in the area surrounding the project. An unspecified number of these future quarries will have graded areas and ultimately revegetated slopes that will have adverse visual impacts similar to the proposed project, particularly when viewed from SR 58. However, the specific number and actual configuration of these future quarries is unknown at this time.
- ~~**Impact AQ-1a Emissions of ROG+NO_x.** Operations at the quarry at the planned production rate of 500,000 tons per year would generate combined emissions of Reactive Organic Gases (ROG) and nitrogen oxides (NO_x) in excess of the daily SLOAPCD thresholds defining a significant impact for these ozone precursors.~~
- ~~**Impact AQ-1b: Emissions of PM₁₀ Fugitive Dust.** Operations at the quarry at a production rate of 500,000 tons per year would generate emissions of PM₁₀ fugitive dust in excess of the daily SLOAPCD thresholds defining a significant impact for this criteria pollutant. The fugitive dust emissions would not exceed the annual threshold.~~
- **Impact Noise-1: Truck Traffic Noise.** The project will generate additional truck traffic, which will increase Ldn values along SR 58 by up to 1.9 dBA, causing a potentially significant impact. In the relatively quiet neighborhood along J Street and Estrada Avenue this is considered a significant impact.
- **Impact NOISE-2: Quarry Operations Noise.** During early phases of the proposed quarry, including the initial construction and quarrying through the completion of Phases 1A and

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1B, it is likely that hourly Leq values caused by the quarry operations at some nearby residences will exceed the County daytime Leq standard of 50 dBA (or ambient plus 1 dBA).

- **Impact NOISE-3a: Blasting Noise.** During early phases of the proposed quarry blasting, Lmax values at nearby residences are predicted to range from 62 dBA to 80 dBA, depending on the prediction method used. Lmax values in excess of 70 dBA are considered a significant impact.
- **Impact NOISE-5: Cumulative Traffic Noise.** The project will add to future traffic noise along SR 58 through Santa Margarita. The cumulative Ldn values will exceed 65 dBA at the exterior of residential locations at the east and west ends of the Santa Margarita Rural Village.
- **Impact Traffic-4: Cumulative Contribution to 2030 Traffic Volumes.** Mitigation for the cumulative traffic impact, mainly for addressing the peak hour volume at Estrada Avenue and El Camino Real, requires a combination of efforts from different agencies. Although the proposed mitigation would reduce impacts to the extent possible, due to the uncertainty regarding Caltrans approval of improvements within their jurisdiction, and uncertainty regarding right-of-way acquisition, it cannot be assured that all improvements would be feasibly constructed prior to the time when they are needed. As a result, cumulative traffic impacts would remain significant and unavoidable.

From this list of significant impacts, the items most amenable to mitigation through the selection of an alternative location or design are the impacts related to aesthetics, ~~and~~ noise, and traffic, which depend on the relationship between the project site and nearby residents or travelers on roadways. Thus, the effort in considering project alternatives has been focused on locations or other measures capable of reducing the quarry effects on aesthetics and noise in its immediate vicinity.

6.4 CATEGORIES OF PROJECT ALTERNATIVES

The main project alternatives are presented in four broad categories:

- No Project Alternative
- Alternative Locations for the Project: two existing quarries and seven alternative locations are reviewed
- Alternative Designs for the Project, which Preserve the Southern Ridgeline: two alternative access drives and a reduced quarry design are reviewed
- Alternative Access Route

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The No Project Alternative discussion is required by CEQA; this Alternative would avoid the site-specific impacts (mainly aesthetics and blasting noise) associated with the project. As such, the No Project Alternative would be environmentally superior to the proposed project in the most basic analysis. According to the CEQA guidelines, at least one additional “environmentally superior” alternative needs to be identified.

In addition to expansion of the two existing quarries, certain alternative locations were chosen generally within the region of the proposed project – within the southern half of the La Panza granitic geological formation, as presented on Figure 6.6-1. More remote locations could have been considered, as well as locations in different geological formations; however, these remote locations would not match well with the intended market, in terms of transportation distances and product quality. One possible off-site region that could supply high quality gravel, crushed cobbles, and sand, is the river bed of the Salinas River or its larger tributaries. A number of such projects have been proposed in the County over the last decade. These projects along the Salinas River have their own environmental issues and controversies and, in any event, could not supply the volume of angular granitic rock ~~best suited for use in asphaltic concrete pavement~~ desired by the project applicant. For these reasons, alternative locations along the Salinas River were not considered for this project.

For the proposed project, different access routes and a reduced design are considered with the intent of keeping all or most of the southern quarry ridge intact as a visual shield to reduce the aesthetic impact of the project – principally on views experienced by travelers on SR 58.

At the end of the section, a table compares the relationship of each alternative to the major project objectives and its relative effect on the major environmental issues when compared to the project as proposed.

6.5 NO PROJECT ALTERNATIVE

With the implementation of a No Project Alternative, land use at the site would continue to be kept as predominantly naturally vegetated hillsides on the steep slopes of the property and limited grazing in the flatter areas. None of the environmental effects or impacts associated with the quarry development would occur. Specifically, the current views of the property from SR 58 and the nearby areas would remain, and there would be no increases in blasting noise levels or traffic. There would be no loss of biological habitat, and no permanent conservation measures placed on any part of the property.

The No Project Alternative would not fulfill the specific project objective related to producing 500,000 tons per year of aggregate material for use in the local development and road construction and maintenance sector. From a broader County perspective, this alternative would not help balance the regional production-consumption gap in aggregate resources discussed in Section 2.2.2 of this EIR. Production at other rock quarries in the

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region would continue and expansions or development of new quarry sites would be anticipated in response to market conditions and subject to appropriate County approvals.

Future uses on this property would be consistent with the Rural Lands designation, and would include continued agricultural use. It is possible that more intensive agricultural uses might occur in the pasture areas adjacent to SR 58, but this would not change the overall land use and appearance of the vicinity.

In summary, the No Project Alternative would avoid the significant aesthetic, blasting, noise impacts, cumulative traffic impacts and other effects of the proposed project and would be environmentally superior in that respect. This Alternative, however would not achieve any of the project objectives.

6.6 ALTERNATIVE LOCATIONS FOR THE PROJECT

In determining potential off-site locations the following considerations were taken into account:

- Located within or in close proximity to the Las Pilitas Planning Area
- Located within the EX1 – Extractive Resource Area Combing Designation
- Adequate size to support a quarry
- Proximity to an existing or feasible road able to support large trucks
- Free from significant land use restrictions
- Desirable attributes in contrast to the proposed quarry (i.e., better shielded from view by travelers on major roadways/highways, or fewer residents in the immediate vicinity)

The two existing quarries in the region meet the above criteria, and seven possible new alternative locations were determined to meet at least some of these criteria within the general vicinity.

None of these alternative sites are within the San Joaquin kit fox habitat area, nor are they within 10 miles of a recorded San Joaquin kit fox observation site (San Luis Obispo County: “San Joaquin Kit Fox Standard Mitigation Ratio Areas” map, December 2007). Furthermore, should kit fox habitat be found on any of these alternative sites, subsequent agency consultation, analysis and mitigation would be required, as generally outlined in a County publication entitled “A Guide to the San Luis Obispo County San Joaquin Kit Fox Mitigation Procedures for the California Environmental Quality Act (CEQA).”

There are likely additional alternative off-site locations, but this discussion provides a reasonable range both in terms of potential benefits and disadvantages. Figure 6.6-1 shows an overview of the alternative locations considered, and Figures 6.6-2 and 6.6-3 show more

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detail for each location. In addition to the larger locations in Figure 6.6-1, three smaller “borrow pits” are shown. These are locations shown on the 1993 USGS Santa Margarita 7.5 minute topographic map, or visible on historic air photos as excavated sites. Only two of these previous borrow pits were clearly in granitic rock near the project site and both of these sites now have residential uses on them; so they were not investigated further for this EIR.

6.6.1 Expansion of Existing Quarries

It may be possible to expand the permitted operations at the existing Rocky Canyon Quarry or the Hanson Santa Margarita Quarry. When the Draft EIR was prepared (Fall 2012), representatives from the Hanson quarry had submitted an application to expand that quarry. Expansion of the existing quarries may be considered in conjunction with the No Project alternative at the Oster family property, and would thus avoid the impacts associated with this project. It may also be reasonable to consider expansion of existing quarries as a way of delaying the proposed project and its accompanying effects for some time.

Depending on project details, the operations at either the Rocky Canyon or Hanson Santa Margarita quarry may increase or continue for a longer duration in the absence of the proposed Oster/Las Pilitas Quarry. Since these operations already exist, their aesthetic effects have already occurred, but they may change somewhat over time. The traffic effects related to truck traffic through Santa Margarita or the southern portion of Atascadero to reach US Highway 101 would continue or perhaps increase slightly. In any event, since they already exist, the effects of these two quarries are already experienced by residents and drivers in the region and may be more acceptable for that reason.

Expanding the permitted operations at the existing quarries may be capable of meeting regional needs and may contribute in the long run towards correcting the production-consumption imbalance for aggregate resources. Neither quarry, however, would provide a local and independent source of aggregate material since both are owned and operated by large vertically integrated international corporations. Developing a new and independent source of aggregate is one of the specific objectives of the applicants for this project. If the proposed quarry is not developed, or if it is delayed, then the local aggregate market will continue its dependence on the existing quarries.

6.6.2 Alternative Location #1

Southwest Portion of El-Pomar Planning Area

Figure 6.6-2 shows the location of this alternative. The primary advantage of Alternative Location #1 would be its reduced impact on aesthetics and blasting noise. There are one or two residences relatively close to the northeast that would be affected by this location, but otherwise the surrounding areas are all vacant ranch land. The site would not be visible from SR 58 or any major highways, but it would be visible from SR 229 particularly for

southbound travelers. This highway is narrow and carries a much smaller daily traffic volume than SR 58 near the project site.

There are several disadvantages to this site as well. Most notable is access to the site. There currently is not an access road that is viable for large vehicles on the site. An existing ranch road from SR 229 could provide access, but it would have to be upgraded and improved to accommodate large trucks. On SR 229, trucks would have to travel either northward through Creston to SR 41, or southward to SR 58. The northerly route would affect Creston, while the southerly route would necessitate travel on steep and winding sections of both SR 229 and SR 58, and would have effects in Santa Margarita identical to the proposed project. The impact to aesthetics would not be eliminated completely as a quarry at this location would be visible from SR 229 and from portions of Creston at a greater distance. Water sources have not been investigated for this location, but it is likely that a project here would have to rely on groundwater. Alternative Location #1 is outside of the Paso Robles Groundwater Basin, and not near any major streams, so the water source for this location is not known.

Biological effects and mitigation measures and land use permitting restrictions are likely to be similar to those at the project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.3 Alternative Location #2

Northeast of the Proposed Project in the Las Pilitas Planning Area

Figure 6.6-2 shows the location of this alternative. The primary advantage of Alternative Location #2 would be its reduced impact on aesthetics and blasting noise to surrounding residents compared to the proposed project. This alternative may be visible from westbound SR 58, but it may be possible to conceal it almost completely behind an existing ridgeline.

The major disadvantage to this site is access. It would require a reinforced crossing over the Coastal Branch of the California Aqueduct and the construction of an intersection at SR 58 to provide adequate turning radius. From this point, trucks to and from the site would use SR 58 and would have to travel on one of its steep and winding segments. Traffic and noise effects in Santa Margarita would be unchanged by this alternative. Water sources have not been determined but groundwater would be the likely source.

Biological and land use issues are likely to be similar to the proposed project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.4 Alternative Location #3

East of SR 229 and West of SR 58 in the Las Pilitas Planning Area

Figure 6.6-2 shows the location of this alternative. In one respect, this location would have a reduced impact on aesthetics, since it would be visible from fewer residences and may be slightly less visible from SR 58 than the proposed project. A ridgeline separates the location from SR 58, but eastbound traffic may have an oblique view towards quarry slopes about one-half mile distant at this location. For this reason, the visual impact of a quarry at this location may be somewhat less than that of the proposed project.

There are several disadvantages to this site. Access would be problematic as it would require either a new intersection with SR 58 or a new road crossing the Coastal Branch of the California Aqueduct to connect to SR 229; and trucks would have to travel the steep winding section of SR 58 to reach the site. Trucks would also use SR 58 through Santa Margarita, so traffic and noise impacts there would not be changed by this alternative. Although visual impacts would be reduced in regard to neighboring residents, the alternative would be visible from SR 58 and perhaps also from SR 229. The Coastal Branch of the California Aqueduct crosses this land, and would require a significant buffer distance that would prevent access to much of the granite formation underlying the property. Biological considerations are likely to be similar to the project site. Water sources have not been determined but groundwater would be the likely source.

Other land use restrictions and onsite biological resources are likely to be similar to the proposed project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.5 Alternative Location #4

Southwest of SR 58 in the Las Pilitas Planning Area

Figure 6.6-2 shows the location of this alternative. Like Alternative Location #3, the only major advantage to this location would be visibility from fewer existing residents when compared to the proposed project. This location would also be less visible from SR 58 than the proposed project mainly because the segment of highway adjacent to Alternative Location #4 has many curves so any views into this alternative site would be fleeting.

There are several disadvantages to this site. It would be visible from SR 58 and it may be visible at the junction with SR 229 as well. Access is possible, but it would require road construction to connect it with SR 58. A large ridgeline may serve to separate this site from residences to the south along Parkhill Road, but the effectiveness of this barrier would depend on design. Traffic would be accommodated on SR 58, but the effects in Santa Margarita would be identical to those of the proposed project. Water sources have not been

determined but the location is along Calf Canyon and shallow or deeper groundwater would likely be the source.

Biological and land use permitting requirements are likely to be similar to the proposed project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.6 Alternative Location #5

South of SR 58 and North of Parkhill Road in the Las Pilitas Planning Area

Figure 6.6-3 shows the location of this alternative. The primary advantage to Alternative Location #5 is its reduced visual impacts on SR 58 traffic, but it would have visual and traffic effects along Parkhill Road and to residents in that area. The traffic and noise effects along SR 58 and through Santa Margarita would be similar to those of the proposed project.

Any project here would have to rely on groundwater. Depending on location and depth, in dry years the potential water supply may not be sufficient.

Biological and land use permitting issues are likely to be similar to the proposed project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.7 Alternative Location #6

Eastern Area of Parkhill Road in the Las Pilitas Planning Area

Figure 6.6-3 shows the location of this alternative. This location is very isolated. Its major advantage is that a quarry operation here would be well removed from any residential uses. Aesthetic and noise effects would also be reduced, since the location is not visible from any major roadways and there are very few residences nearby. Trucks would use Parkhill Road and SR 58, so traffic and noise effects in Santa Margarita would be similar to those from the project.

There are several disadvantages to this site. A new access road would have to be constructed into the property from Parkhill Road. The travel route to market areas would only be about three miles longer than for the proposed project, but that distance would be along Parkhill Road. Residents along this road would experience the additional truck traffic and attendant roadway noise levels.

Like Alternative Location #5, groundwater supplies in this area may be reduced in drought periods. Biological and other land use permitting issues at this location are expected to be similar to those at the proposed project site. Permission or willingness of landowner(s) to develop this site has not been determined.

6.6.8 Alternative Location #7

Seven Oaks Way in the Las Pilitas Planning Area

Figure 6.6-3 shows the location of this alternative. Like Alternative Location #6, this location is also very isolated but would require access to and use of Parkhill Road and Seven Oaks Way by heavy truck traffic. This alternative would avoid or reduce direct visual and blasting noise effects for residents near the proposed project site, but would affect other residents along Parkhill Road and in the Rural Lands along Seven Oaks Way. The traffic and noise effects through Santa Margarita would be unchanged.

Water sources have not been determined but this region extends closer to the main drainage of the Salinas River. It is not riparian to the Salinas River, however, and not on a major creek, so this alternative would probably rely on groundwater from deeper fractured granite.

Biological and other land use permitting issues are likely to be similar to the proposed project site, but they have yet to be determined. Permission or willingness of landowner(s) to develop this site has not been determined.

6.7 ALTERNATIVE DESIGNS FOR THE PROJECT, WHICH PRESERVE THE SOUTHERN RIDGELINE

One of the significant adverse effects of the project as proposed is its visual impact as seen by travelers on SR 58 and from residences in the immediate vicinity and somewhat farther to the southwest along SR 58. Although the project would preserve two minor ridgelines on the west and east sides of the quarry to block views into the major part of its operations, it would remove the ridge connecting these two “shields,” exposing slopes during the Phase 1A portion of the mining, and higher but more distant slopes in the Phase 3A and 3B operations. Retention of this southern connecting ridge, or Phase 1A ridge, would provide a much larger visual and noise barrier to reduce the effects of quarry operations.

Figure 6.4-1 shows the general location of two alternate access routes that would retain the southerly ridge adjacent to the quarry. The following paragraphs provide a summary description and review of these two alternatives.

6.7.1 Western Access Drive Alternative

The access point on SR 58 for this alternative would be the same as that proposed for the project, but the access driveway would be routed along or adjacent to the existing farm roads through the property towards the west, and then northward around the end of the ridge at the southwest corner of the property and eastward into the main drainage of the proposed quarry. This approach would preserve the southern quarry ridge and would greatly reduce the visibility of cut slopes within the quarry itself from the south and southwest along SR 58.

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Very small exposures of cut slopes would still be visible from these areas, however, along the uppermost portions of the northern quarry ridge. As there would be less material to extract, the lifetime of the quarry would also be reduced.

This alternative would also reduce operational and blasting noise effects in the area. Effects related to truck traffic along SR 58 and through Santa Margarita, however, would be identical to those in the proposed project.

There are several disadvantages to this alternative; some related to environmental issues and others related to the property use. Along its eastern segment, the access road would have to be located north of the Coastal Branch of the California Aqueduct. This would necessitate cut and fill slopes that would be visible to the residences to the south and travelers on SR 58. Once the roadway departs from the alignment of the aqueduct, there may be more flexibility for its location but its design would have to balance competing issues. To minimize the visibility of cut slopes, the alignment could be placed towards the south closer to the Salinas River. While preferable for aesthetic reasons, this alignment would affect 10 to 20 more oak trees and would be closer to the riparian corridor of the Salinas River, about 200 feet to the south. Potential impacts to the river system would require appropriate drainage design to avoid the discharge of roadway pollutants to the surface water. If the Salinas River Trail is developed in this area, then the truck traffic would also affect users of the trail.

To avoid the potential impacts of roadway construction on the flatter areas closer to the river, the western access alternative could be designed farther to the north into the base of the hillside. If the route were to avoid extending onto the neighboring property to the west, it would also necessitate removal of a portion of the ridge at the southwest corner of the property, which is feasible for a quarry project that will be removing large masses of rock in any event.

Regardless of how the western access road is routed along the Salinas River, after it turns to the north and then to the east to reach the quarry site it will have an adverse effect on the main drainage associated with the quarry. This is an area with oak riparian and oak woodland habitat that would be conserved under the project as proposed. With this alternative, construction of the main access route would remove of an additional 10 to 20 oak trees adjacent to the bottom of the drainage. A larger number of trees (50 to 70) located on the north-facing slope in this drainage would remain preserved. A smaller drainage area to the northwest would not be affected by this alternative, or by the project as proposed.

The route would go across an existing corral and the ranch compound area, and would probably require moving one or more barns and storage buildings. The Coastal Branch of the California Aqueduct also passes through this area so the access road carrying heavy trucks would have to avoid this large buried pipeline. Depending on how the design along the Salinas River is handled, this alternative may also extend on to the neighboring property to

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the west, requiring that owner's permission. While not environmental in nature, both of these conflicts may reduce the feasibility of this alternative. Truck traffic would also pass through Santa Margarita so traffic and noise effects there would be similar to the proposed project.

Preservation of the southerly ridgeline in the quarry site under this alternative would greatly reduce the aesthetic impact of the project, but it would also reduce the volume of quarried rock by leaving that ridge in place. This would result in the loss of about 1,000,000 cubic yards of mineable material due to the exclusion of Phase 1A and 1B, or about 20 percent of the total proposed quarry material.

In summary, this western access alternative would reduce some aesthetic impacts, but it would have greater biological impacts, mainly due to road construction in the main drainage area of the quarry. This western access alternative would have more conflict with existing uses (ranch and California Aqueduct) and proposed uses (Salinas River Trail) than the project as designed. For this reason, the western access alternative is not considered environmentally superior to the proposed project.

6.7.2 Eastern Access Drive Alternative

The Oster family property extends another quarter-mile towards the northeast from the northeastern portion of the proposed quarry. From this far northeastern corner, the property is accessible via an existing service road at SR 58 and connecting system of ranch roads and trails. A re-design of the quarry using this eastern alternate access route might be possible, and it might reduce aesthetic impacts for views from eastbound SR 58 and some of the residences southwest from the project site. This alternative would also reduce operational and blasting noise effects in the vicinity by retaining the southerly ridge in the quarry as a barrier for residences located farther south. Truck traffic would have to use one of the steep and winding segments of SR 58, and would also pass through Santa Margarita so traffic and noise effects there would be similar to the proposed project.

Although it may have some benefits, there are significant constraints to this access, and the additional quarrying necessary to reach the main granitic mass of the project would also have aesthetic and other impacts of its own, discussed in the following paragraphs.

Using this eastern access drive alternative would require a major reconstruction of the service road intersection at SR 58 and the construction of a reinforced crossing over the Coastal Branch of the California Aqueduct. Since the topography of this section of the property makes construction of a road to the current site infeasible, mining would begin within a few hundred feet of the property boundary and move southwestward toward the main quarry site. As with the proposed project, a buffer of 200 feet would be maintained between quarry areas requiring blasting and the Coastal Branch of the California Aqueduct. With this approach, the southern ridgeline that would have been extracted in Phase 1A and 1B would be preserved, which would reduce aesthetic and blasting noise effects to residents to the south and traffic

on SR 58. Although material extraction would be lost by the exclusion of Phase 1A and B, the new material gained from the northeast would likely match or exceed it.

This approach to the project design would also require removal of a portion of the southeastern ridgeline, possibly exposing portions of the quarry to view from SR 58 and to existing homes on Parkhill Road. Although the extent of this visual impact cannot be determined without detailed designs, it would be less than the impact of the project as proposed. In addition, this alternative would remove a major portion (about half) of the mature oaks trees in the oak woodland habitat on the north-facing slopes in the northeastern part of the property. Thus, although some aesthetic impacts would be avoided others would be created, and the biological impacts of this alternative would be greater than the proposed project.

6.7.3 Alternative Quarry Design – Narrow Cut Alternative

This alternative would make the slimmest cut possible through the southern ridgeline, retaining most of this visual shield between the eastern and western small ridges retained in the proposed project. A narrower cut in Phases 1A and 1B would have both a smaller exposed cut slope initially, and would also leave more of the ridgeline to block views into the later slopes in Phases 3A and 3B of the quarry. The general intent is that this narrower cut would appear as a slot or notch through the southern ridge. This alternative would not completely avoid the aesthetic impact of the project, but it would reduce it. Quarry operations and blasting noise may also be reduced in this alternative. Truck traffic would remain unchanged and the traffic and noise effects in Santa Margarita would be similar to those of the proposed project.

Detailed designs for this alternative have not been prepared, but it would require altering the size and placement of the processing and stockpile yard and would reduce the volume of rock recovered in the overall quarry lifetime. The processing and stockpile area proposed in the project is about three acres in size to allow adequate area for material storage, work areas, and truck movement. It must be located at an elevation that can be reached by the access road at a grade that is safe for heavy truck traffic. The side slopes for the cut through the southern ridge would have to be maintained at an overall slope of 1.5:1 (horizontal: vertical) regardless of the cut's width. These constraints combine to require a relatively wide cut through the ridge to accommodate the processing and stockpile yard, which would reduce the intended effect of this alternative, or placement of the processing and stockpile area farther to the northwest, which may impact more of the biological habitat and drainage in this area. A different option within this alternative would be to move the quarry entrance, scale, scale house, and stockpile areas to a different location in the southern and flatter portions of the property. This would keep the cut through the southern ridgeline narrow, but would make more of the processing operations, storage areas, and related activities visible from SR 58 so the aesthetic impact may be judged to be worse.

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In summary, this alternative would reduce the excavation through the southern ridge to a narrow cut or notch, and reduce the extent of views to the interior quarry slopes and, thus reduce aesthetic impacts. Some portion of the quarry would still be visible, however, and depending on design changes necessary to accomplish this alternative there may be additional aesthetic impacts if the quarry stockpiles and processing area become more visible. If the processing and stockpile area could be kept well north of the access road and out of view from SR 58, and if biological impacts did not increase significantly, then it may be considered environmentally superior to the proposed project. The CEQA Guidelines require the identification of an environmentally superior alternative if the No Project alternative is the only other alternative that is superior to the proposed project (CEQA Guidelines Section 15126.6(e)(2)). This “Narrow Cut Alternative” would have a reduced aesthetic impact when compared to the project, and would also have less noise impacts from operations and blasting since these activities would also be better shielded from residences to the south.

The major disadvantage of this alternative is the reduction in available aggregate material that could be recovered. Depending on the elevation of the processing and stockpile pad, and how this would affect the mine plan into the rest of the quarry, this alternative would reduce the available aggregate volume by at least 15 to 20 percent, and possibly more. Other aspects of the design and operation would remain as proposed, so the costs for the access road, water system, scale, scale house, and other facilities and equipment would not be altered.

6.8 ALTERNATIVE ACCESS ROUTE TO SR 58 VIA HANSON QUARRY

Some of the identified noise impacts of the project are associated with truck traffic through residential neighborhoods and the school zone along SR 58. Although other effects related to truck traffic have been found to be less than significant impacts, or can be mitigated to that level through other measures, they are still of concern to residents in the area. These other issues include traffic safety and air pollution from truck exhaust. In response to these issues, an alternative access route for truck traffic between the project site and SR 58 was considered. This route would use a combination of existing private roads plus construction of a new private road segment to move truck traffic to and from the project site via the existing Hanson Santa Margarita Quarry access road. The general location for this route is shown in Figure 6.8-1, and it consists of the following segments – starting at the project site and leading to El Camino Real between Santa Margarita and Atascadero:

- Quarry site to SR 58 using the access driveway as proposed
- SR 58 for 0.4 miles
- Existing private road (provides access to local residence and alternate access to Hanson Quarry)
- New road segment to bypass Hanson Quarry

FINAL EIR OSTER/LAS PILITAS QUARRY PROJECT ALTERNATIVES

- Existing Hanson Quarry Access Road
- El Camino Real either north or south to US Highway 101

From the intersection of El Camino Real and the Hanson Quarry access road, traffic from the proposed Oster/Las Pilitas Quarry could turn either northward or southward to access US Highway 101. Northbound traffic would use Santa Barbara Road in Atascadero, and southbound traffic would use SR 58 through the Santa Margarita village to reach the highway.

This alternative access route would completely avoid truck traffic noise, safety, and other concerns raised by members of the community along the SR 58 segment east of Santa Margarita. In particular, it would avoid adding any truck traffic to Estrada Avenue and J Street in Santa Margarita, and thus avoid adding traffic in the vicinity of the school crossing for Santa Margarita Elementary School and through the adjacent residential neighborhood.

This alternative access route would reduce, but would not eliminate, truck traffic through the downtown Santa Margarita segment of SR 58. Traffic to and from aggregate market areas in the south would still use this segment of SR 58 to access US Highway 101. This would reduce the contribution of truck traffic to future noise levels at residents along SR 58 through downtown Santa Margarita, but cumulative traffic noise levels at these locations would still be significant (i.e., above 60 dBA CNEL). There would also be an increase in truck traffic noise along El Camino Real to the north and along Santa Barbara Road, but the is a designated truck route within the City of Atascadero (City of Atascadero 2002:Figure III-5).

The cost and feasibility of this alternative access route is not known. It would require obtaining permission from several property owners and/or easement holders who control the existing Hanson Quarry access road and the existing road that connects the Hanson Quarry south to SR 58 near the Salinas River. This southerly segment is not used by Hanson but it does connect between SR 58 and the southern portion of the Hanson Quarry, and runs through the quarry to the Hanson Quarry access road. As envisioned under this alternative, portions of this existing roadway system would be used and a new private roadway segment would be constructed to bypass the circuitous segment through the Hanson Quarry operation. The new roadway segment would be approximately three-quarters of a mile long, and would connect between the Hanson Quarry access road and the ranch road just south of the Hanson Quarry. There do not appear to be any major environmental constraints to this alternative since it would cross disturbed grasslands with a few very minor drainages. Just north of SR 58, however, the existing ranch road crosses the Coastal Branch of the California Aqueduct. Design of any road crossing improvement at this location would have to protect the structure of the aqueduct. The costs of improving the existing ranch road and developing the new road segment as described in this alternative would be in addition to the access and improvement costs associated with the project as proposed.

6.9 SUMMARY OF PROJECT ALTERNATIVES

The conclusions expressed in Sections 6.5 through 6.8 are summarized in Table 6-1 below.

6.10 CONCLUSION

Thirteen alternative approaches have been identified in this Section; a “reasonable range of alternatives,” as required by Section 15126.6 of the CEQA Guidelines, has been provided. After consideration of these alternatives, the “Alternative Quarry Design – Narrow Cut,” as described above in Section 6.7.3, represents the environmentally superior alternative to the original project as proposed.

**FINAL EIR OSTER/LAS PILITAS QUARRY
LAS PILITAS QUARRY, SAN LUIS OBISPO COUNTY**

**TABLE 6-1
SUMMARY OF PROJECT ALTERNATIVES**

Alternative	Project Objective(s) Met	Project Objective(s) Not Met	Reduces Unmitigable Aesthetic and Noise Impacts?	Creates Other Environmental Impacts?
6.5 No Project	None	A, B, C, D, E and F	Yes, no further development would occur, except for agricultural uses.	None anticipated at project site, assuming future uses continue the practices of past agricultural uses.
6.6.1 Expansion of Existing Quarries	A, B, E and F	C and D.	Yes, but only at the proposed project site. Aesthetic, noise, and other impacts would continue at existing sites.	Probably, at the existing quarry sites.
6.6.2 Alternative Location #1	A, B, C, D and E	F	Yes. There are one or two residences relatively close to the northeast that would be affected by this location, but otherwise the surrounding areas are all vacant ranch land. Not visible from SR 58.	There currently is not an access road that can convey large vehicles to the site. An existing ranch road from SR 229 could provide access, but it would have to be upgraded and improved to accommodate large trucks. On SR 229, trucks would have to travel either northward through Creston to SR 41, or southward to SR 58. The northerly route would affect Creston, while the southerly route would necessitate travel on steep and winding sections of both SR 229 and SR 58, and would have effects in Santa Margarita identical to the proposed project.
6.6.3 Alternative Location #2	A, B, C, D and E	F	Partially. This alternative may be visible from westbound SR 58, but it may be possible to conceal it almost completely behind an existing ridgeline. Not visible from residences. Traffic and noise effects in Santa Margarita would be unchanged.	Access to this site would require a reinforced crossing over the Coastal Branch of the California Aqueduct and the construction of an intersection at SR 58 to provide adequate turning radius. From this point, trucks to and from the site would use SR 58 and would have to travel on one if its steep and winding segments.
6.6.4 Alternative Location #3	A, C, D and E	B, F	Partially. Reduced impact on aesthetics, since it would be visible from fewer residences. Traffic and noise impacts in Santa Margarita would be unchanged.	Access would require either an intersection with SR 58 or a new road crossing the Coastal Branch of the California Aqueduct to connect to SR 229; and trucks would have to travel the steep winding section of SR 58 to reach the site. Although visual impacts would be reduced in regard

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LAS PILITAS QUARRY, SAN LUIS OBISPO COUNTY**

**TABLE 6-1 (CONTINUED)
SUMMARY OF PROJECT ALTERNATIVES**

Alternative	Project Objective(s) Met	Project Objective(s) Not Met	Reduces Unmitigable Aesthetic and Noise Impacts?	Creates Other Environmental Impacts?
				to neighboring residents, the alternative would be visible from SR 58 and perhaps also from SR 229.
6.6.5 Alternative Location #4	A, B, C, D and E	F	Partially. Reduced impact on aesthetics, since it would be visible from fewer residences. Effects in Santa Margarita would be identical to those of the proposed project.	It would be visible from SR 58 and it may be visible at the junction with SR 229 as well. Access is possible, but it would require road construction to connect it with SR 58. A large ridgeline may serve to separate this site from residences to the south along Parkhill Road, but the effectiveness of this barrier would depend on design.
6.6.6 Alternative Location #5	A, B, C, D and E	F	Partially. Reduced visual impacts on SR 58 traffic. Traffic and noise effects along SR 58 and through Santa margarita would be similar to those of the proposed project.	This alternative would have visual and traffic effects along Parkhill Road and to residents in that area. Any project here would have to rely on groundwater. Depending on location and depth, in dry years the potential water supply may not be sufficient.
6.6.7 Alternative Location #6	B, C, D and E	A, F	Partially. Aesthetic and noise effects would be reduced, since the location is not visible from any major roadways and there are very few residences nearby. Traffic and noise effects in Santa margarita would be similar to those from the project.	A new access road would have to be constructed into the property from Parkhill Road. Residents along Parkhill Road would experience additional truck traffic and roadway noise levels. Groundwater supplies in this area may be reduced in drought periods.
6.6.8 Alternative Location #7	B, C, D and E	A, F	Partially. This alternative would avoid or reduce direct visual and blasting noise effects for residents near the proposed project. The traffic and noise effects through Santa Margarita would be unchanged.	This location would require access to and use of Parkhill Road by heavy truck traffic and affect residents along this road and in the Rural Lands along Seven Oaks Way.
6.7.1 Western Access Driveway	B, D, E and F	A, C	Partially. This general approach would preserve the southern quarry ridge and would greatly reduce the	Cut and fill slopes for the access road would be visible to residences to the south and travelers on SR 58. If the eastern segment is placed closer to

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LAS PILITAS QUARRY, SAN LUIS OBISPO COUNTY**

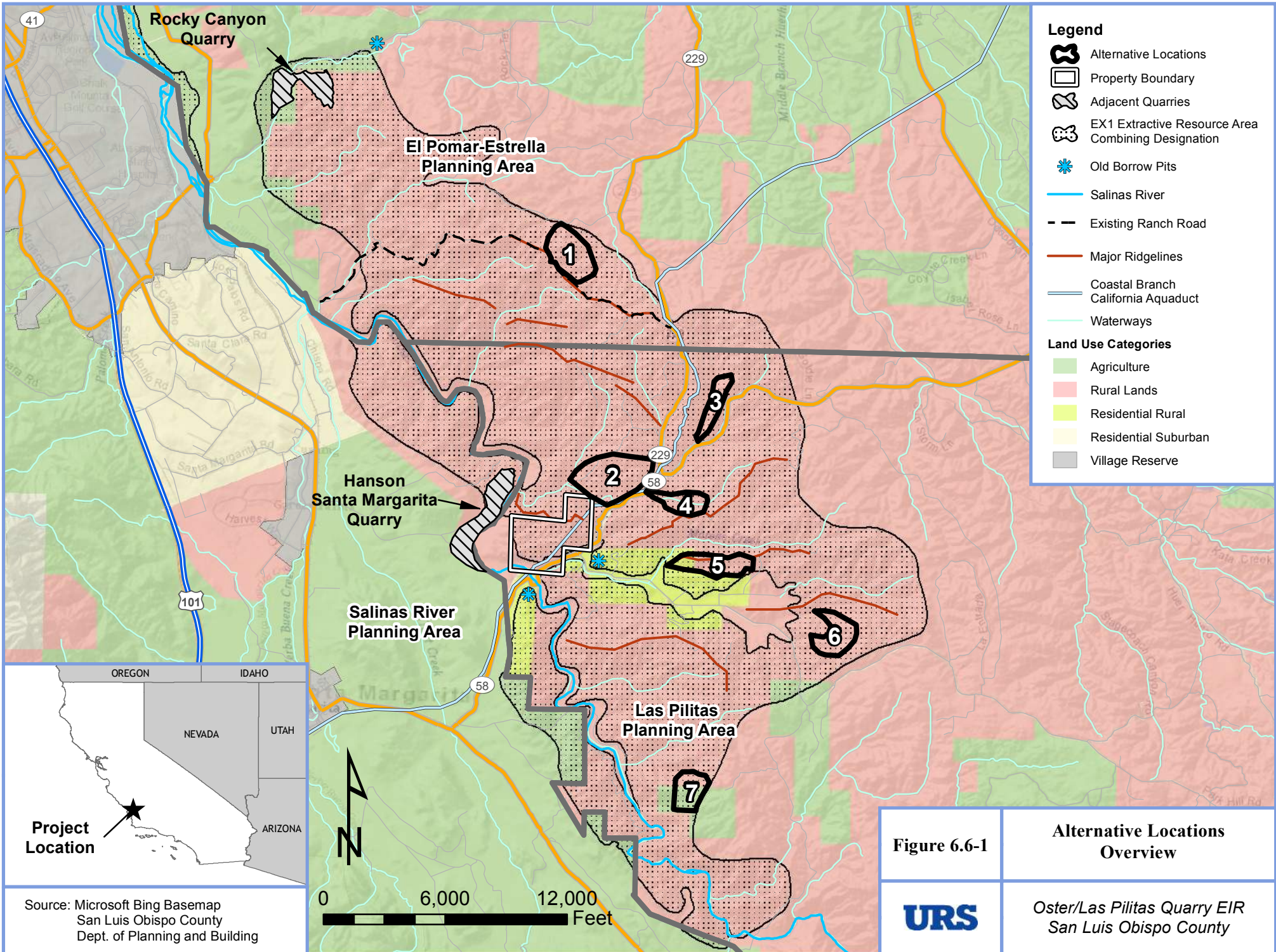
**TABLE 6-1 (CONTINUED)
SUMMARY OF PROJECT ALTERNATIVES**

Alternative	Project Objective(s) Met	Project Objective(s) Not Met	Reduces Unmitigable Aesthetic and Noise Impacts?	Creates Other Environmental Impacts?
			visibility of cut slopes within the quarry itself from the south and southwest along This alternative would also reduce operational and blasting noise effects in the area. Effects related to truck traffic along SR 58 and through Santa Margarita would be identical to those in the proposed project. SR 58.	the Salinas River, it would affect 10 to 20 oak trees and be closer to the riparian corridor and proposed Salinas River trail. The northerly segment entering the quarry site would remove an additional 10 to 20 oak trees.
6.7.2 Eastern Access Driveway	B, C, D, E and F	A	Partially. A re-design of the quarry using this eastern alternate access route might reduce aesthetic impacts for views from eastbound SR 58 and some of the residences southwest from the project site. This alternative would also reduce operational and blasting noise effects in the vicinity by retaining the southerly ridge in the quarry. Traffic and noise effects in Santa Margarita would be similar to the proposed project.	This alternative would require a major reconstruction of the service road intersection at SR 58. The additional quarrying necessary to reach the main granitic mass of the project would have aesthetic and other impacts of its own. This alternative would remove about half of the mature oak trees in the oak woodland habitat in the northeastern part of the property and biological impacts would be greater than the proposed project.
6.7.3 Alternative Quarry Design – Narrow Cut	A, B, D, E and F	C	Partially. This alternative would reduce the excavation through the southern ridge to a narrow cut or notch, and reduce but not completely avoid the aesthetic impact of the project. Quarry operations and blasting noise may also be reduced in this alternative. Truck traffic would remain unchanged and the traffic and noise effects in Santa Margarita would be similar to those of the proposed project.	Depending on design changes necessary to accomplish this alternative there may be additional biology impacts if the processing area and stockpiles are moved to the northwest, or aesthetic impacts if they are moved to the access area and become more visible.

**FINAL EIR OSTER/LAS PILITAS QUARRY
LAS PILITAS QUARRY, SAN LUIS OBISPO COUNTY**

**TABLE 6-1 (CONTINUED)
SUMMARY OF PROJECT ALTERNATIVES**

Alternative	Project Objective(s) Met	Project Objective(s) Not Met	Reduces Unmitigable Aesthetic and Noise Impacts?	Creates Other Environmental Impacts?
6.8 Alternative Access Route	A, B, C, E, F	D	Partially. Would avoid Truck noise impacts along Estrada Avenue and J Street segments of SR 58, and would reduce truck noise impacts along SR 58 through Santa Margarita village area.	Construction impacts along new and improved roadway segments would all likely be mitigable. Minor increase in truck noise effects along truck route to the north via El Camino Real and Santa Barbara Road to US Highway 101.



41

Rocky Canyon Quarry

229

El Pomar-Estrella Planning Area

1

Hanson Santa Margarita Quarry

2

3

4

5

6

Salinas River Planning Area

58

Las Pilitas Planning Area

7

OREGON IDAHO

NEVADA UTAH

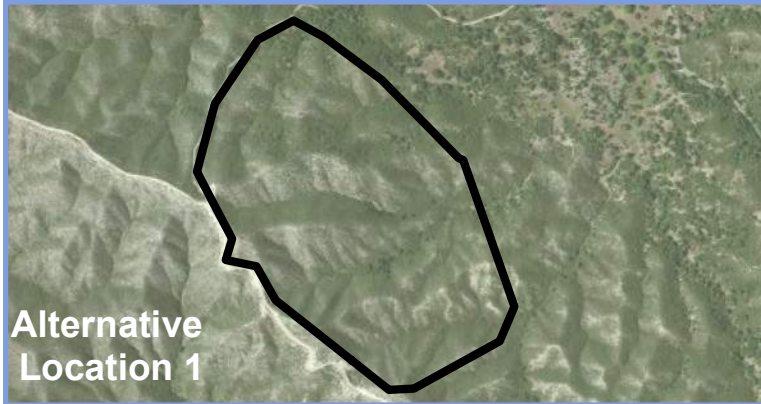
ARIZONA

Project Location



0 6,000 12,000 Feet

Source: Microsoft Bing Basemap
San Luis Obispo County
Dept. of Planning and Building



Alternative Location 1



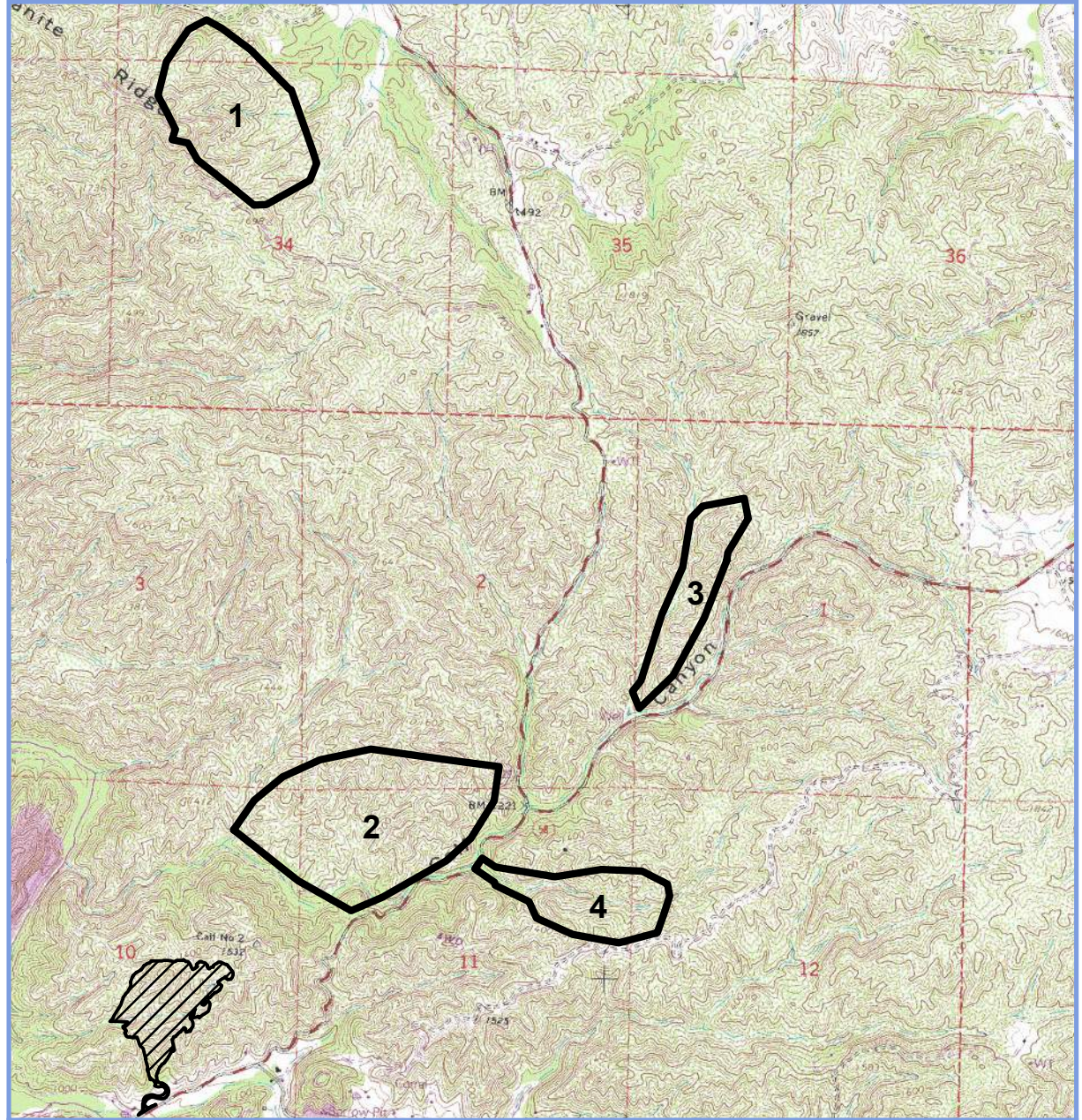
Alternative Location 2





Alternative Location 3



Alternative Location 4



Legend

-  Alternative Locations
-  Proposed Quarry

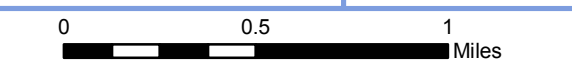
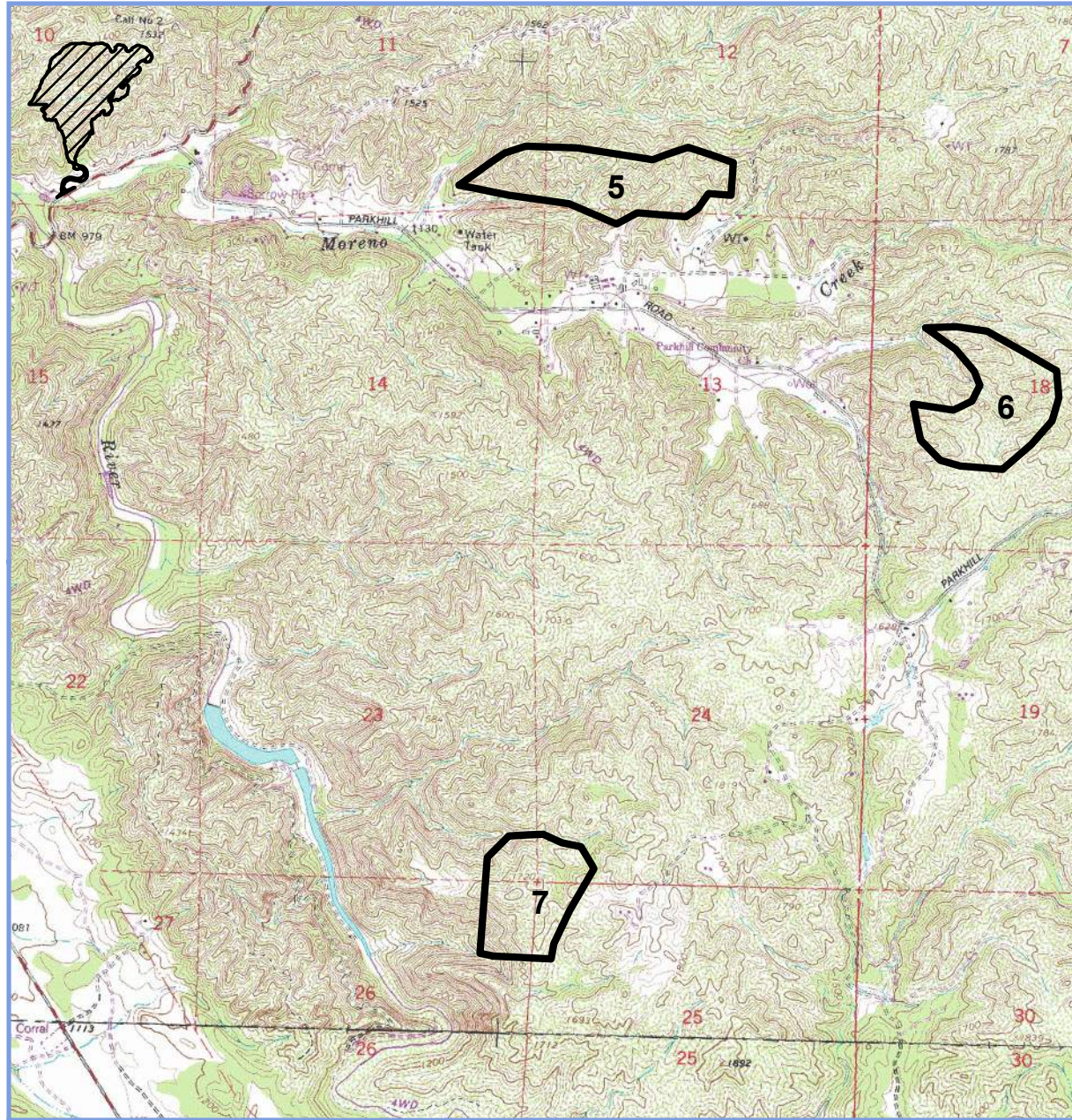
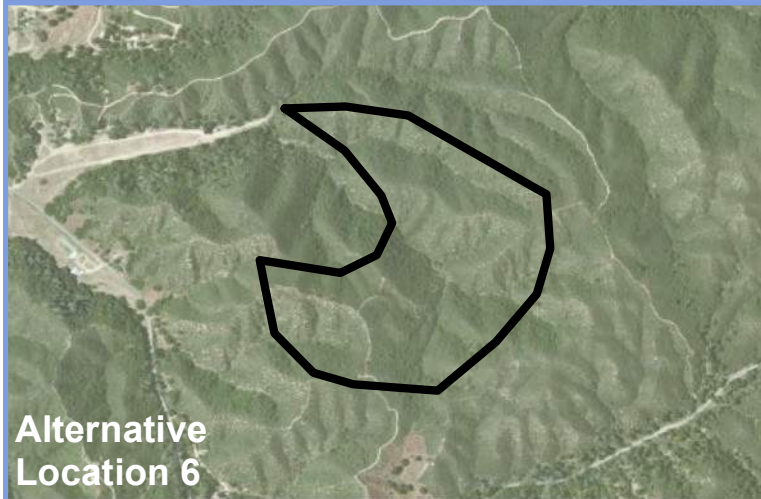
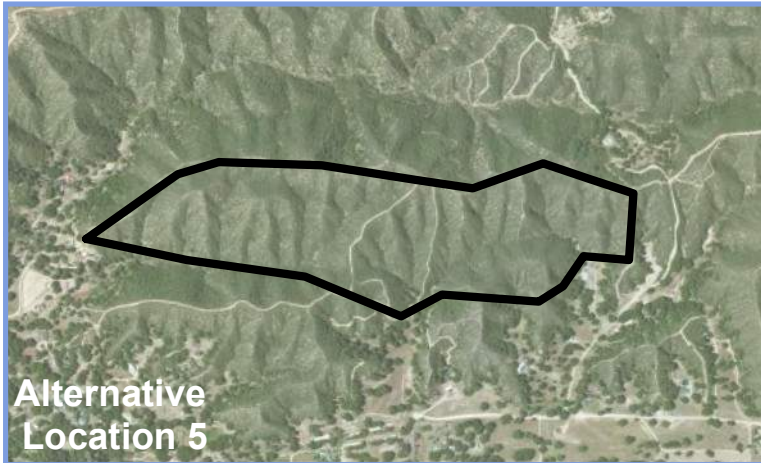


Figure 6.6-2



Alternative Locations 1-4



Oster/Las Pilitas Quarry EIR
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Legend

-  Alternative Locations
-  Proposed Quarry

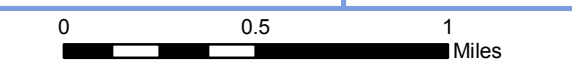


Figure 6.6-3

Alternative Locations 5-7



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

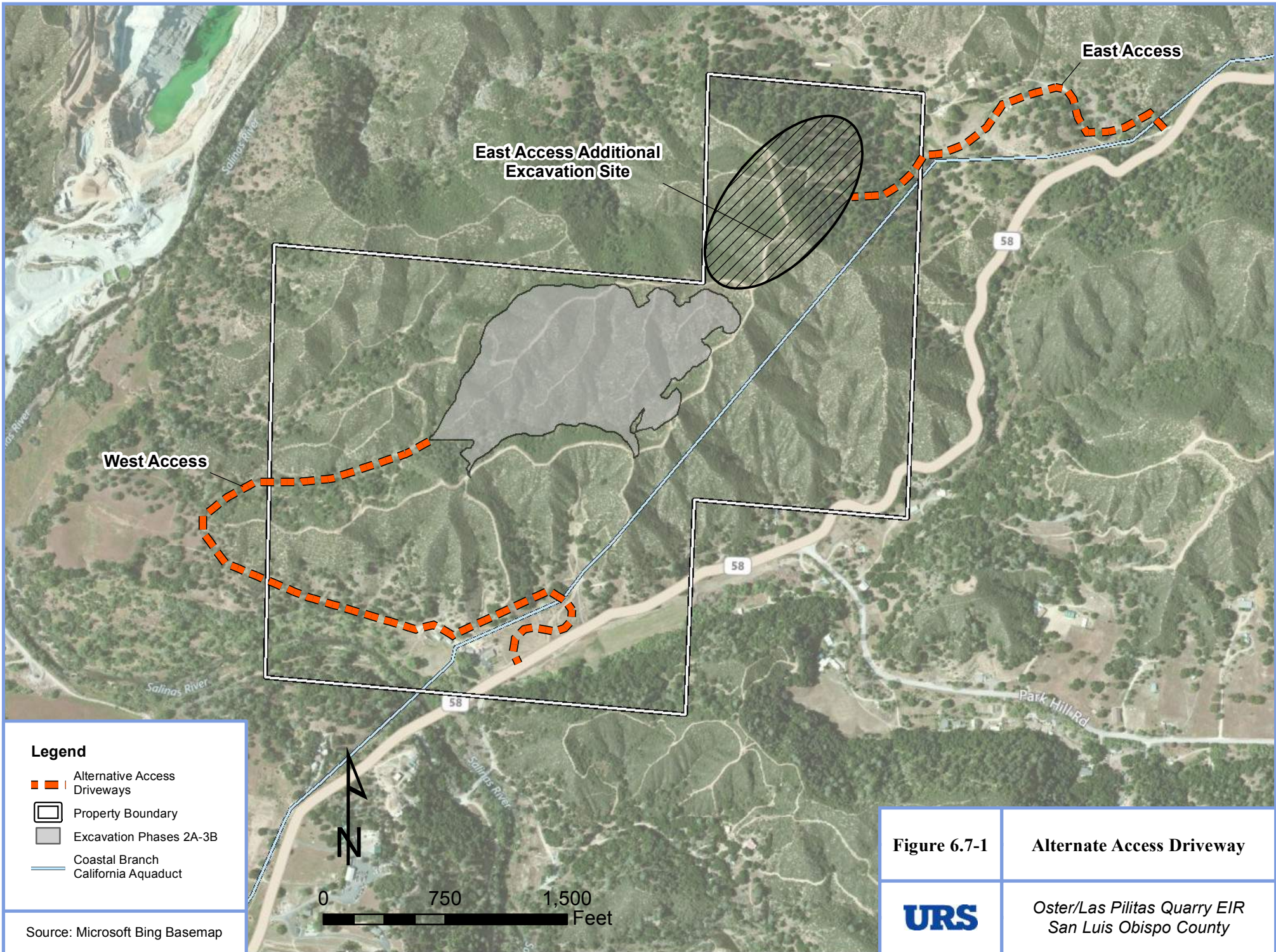
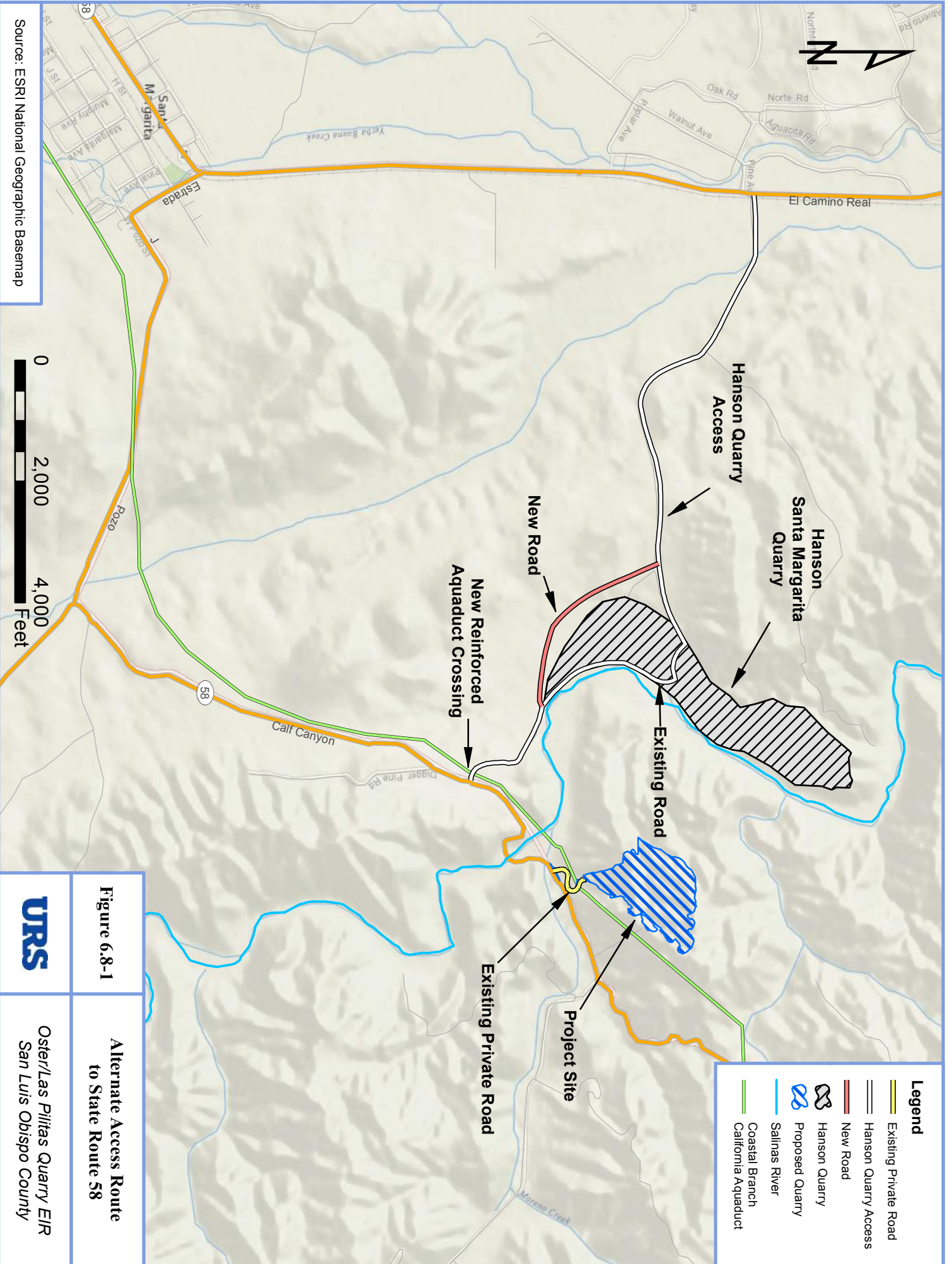


Figure 6.7-1 **Alternate Access Driveway**

URS Oster/Las Pilitas Quarry EIR
San Luis Obispo County



Source: ESRI National Geographic Basemap

0 2,000 4,000 Feet

Figure 6.8-1

Alternate Access Route to State Route 58



Oster/Las Pilitas Quarry EIR
San Luis Obispo County

- Legend**
- Existing Private Road
 - Hanson Quarry Access
 - New Road
 - Hanson Quarry
 - Proposed Quarry
 - Salinas River
 - Coastal Branch California Aquaduct

**SECTION 7.0
OTHER CEQA CONSIDERATIONS**

Section 15126 of the State CEQA Guidelines requires the EIR to discuss certain subjects, including: Growth Inducement; Energy Consumption; Significant Environmental Effects that Cannot be Avoided and Significant Irreversible Effects. All of these subjects are presented in Section 7.0.

7.1 GROWTH INDUCEMENT

Section 15126(d) of the State CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, either directly or indirectly, including ways in which a project could remove an obstacle to growth. The Oster/Las Pilitas Quarry's potential to induce growth is discussed in Sections 7.1.1 and 7.1.2.

Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed quarry's growth-inducing potential would therefore be significant if it could result in unavoidable significant effects in one or more environmental issue areas presented in this EIR.

7.1.1 Population and Economic Growth

Residential land uses are not proposed as a part of the Oster/Las Pilitas Quarry project and the number of employees (~~three to five~~ less than 10) is not anticipated to significantly increase the demand for housing. Consequently, any increase in population would therefore be less than significant when compared to long-term growth projections for the County.

Buildout of the Oster/Las Pilitas Quarry under the project approvals would result in a maximum annual production of 500,000 tons of aggregate material, including recycled asphalt and Portland cement concrete, over a 25- to 58-year timeframe. The economic growth that could be accommodated by this project would provide benefits in terms of short- and long-term jobs and County tax revenues. This economic growth will also provide additional opportunities for local employment. The proposed Oster/Las Pilitas Quarry would increase the amount of economic activity, and therefore induce growth; however, as described in Section 2.0, Project Description, the growth would be consistent with the economic development goals and policies that have been adopted for the County in the General Plan.

Circulation, water, and drainage infrastructure would be constructed to accommodate the quarry on the site. Because the project will supply its own water and wastewater needs, and its drainage and other facilities will also be integral with the project, there will be no additional demand for services from districts or other municipal service providers, and no associated economic activity. The project will use relatively small amounts of electricity, and

FINAL EIR OSTER/LAS PILITAS QUARRY OTHER CEQA CONSIDERATIONS

will have a negligible effect on police and fire services. This additional small demand for services and multiplier-effect related economic growth is not expected to significantly impact the region, and the costs of such will be at least partially offset by the additional tax base, both in property taxes and sales taxes. As a result, no significant physical effects are expected to result from economic growth generated by the proposed Oster/Las Pilitas Quarry. Impacts would be less than significant.

7.1.2 Removal of Obstacles to Growth

A physical obstacle to growth typically involves the lack of public service infrastructure. Similarly, the elimination or change in a regulatory obstacle, including existing growth and development policies, can result in new population growth.

Buildout of the Oster/Las Pilitas Quarry would not require extension/expansion of public service infrastructure to serve planned development. New internal project infrastructure that would be required includes new roadways within the site, the addition of on-site stormwater drainage facilities, and on-site water infrastructure. The potential for each of these types of infrastructure to induce growth is negligible, in that these facilities would not accommodate development beyond the project site or more intensive development outside of the project area, and hence, would not remove an existing obstacle to future growth. Impacts would be less than significant.

7.2 ENERGY CONSUMPTION

According to State CEQA Guidelines the goal of conserving energy implies the wise and efficient use of energy. In order to assure that the energy implications of a proposed project are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of a proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resource Code Section 21100(b)(3) and State CEQA Guidelines, Appendix F).

The proposed project would provide an additional source for aggregate materials in the region that could be used to supply area projects. A primary source of energy consumption by the proposed project would be petroleum products for vehicles and equipment during the construction and operational phases.

Within the United States, transportation is the second largest consumer of energy accounting for approximately 71 percent of the petroleum used in the United States. Petroleum used by light vehicles accounted for more than half of the energy consumption by the traffic sector in 2009 (about 62 percent). Petroleum consumption from heavy duty (HD) vehicles made up 18 percent of energy consumption in 2009 and is projected to increase to 20 percent of the energy consumption within the transportation sector by 2035 (NHSTA 2011: page 3-9)

FINAL EIR OSTER/LAS PILITAS QUARRY OTHER CEQA CONSIDERATIONS

The Energy Policy and Conservation Act of 1975 (EPCA) mandated that the National Highway Traffic Safety Administration (NHTSA) establish and implement a regulatory program for motor vehicle fuel economy (Chapter 329 of Title 49 of the U.S. Code as amended by the Energy Independence and Security Act of 2007). The EPCA established average fuel economy standards to reduce energy consumption for passenger automobiles and non-passenger automobiles that weigh less than 10,000 pounds, called the Corporate Average Fuel Economy Program (CAFE).

The complementary Heavy-Duty National Program developed by the Environmental Protection Agency (EPA) and NHTSA applies to combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles including buses, refuse and utility trucks. The final rules were published in the Federal register Vol. 76, No 179, Thursday September 15, 2011. The new program sets fuel efficiency and greenhouse gas emission standards for the three categories of medium- and heavy-duty trucks beginning in 2014. Heavy-duty trucks account for a large portion of domestic oil use. The new standards for heavy-duty trucks are specifically designed to account for the kind of work performed by the different categories of vehicles:

- Heavy-duty pickup trucks and vans must meet targets for gallons of fuel consumed per mile as well as grams of carbon dioxide (CO₂) emissions per mile.
- Combination tractors or semi-trucks and vocational vehicles must meet targets for gallons of fuel consumed and GHG emissions per ton-mile. This figure is calculated by dividing gallons of fuel consumed and grams of CO₂ emissions per mile by tons of freight hauled.
- Within each of the categories of trucks, more specific targets are laid out based on the design and purpose of the vehicle. Fuel efficiency improvement goals are then charted for each year and for each vehicle category and type.

Given that the proposed project would be a mining operation, heavy equipment and trucks are a necessary part of project operations. Vehicles and equipment used by the proposed project would be subject to applicable fuel efficiency standards. In addition, the proposed project would help supply area projects which could reduce the number of vehicles miles traveled by not having to source material outside the region. Therefore, project impacts related to energy consumption would be less than significant.

7.3 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

This information is presented in the “Environmental Consequences of the Project” section of the Executive Summary.

**FINAL EIR OSTER/LAS PILITAS QUARRY
OTHER CEQA CONSIDERATIONS**

7.4 SIGNIFICANT IRREVERSIBLE CHANGES

The environmental effects of the proposed project are discussed in Section 4 of this EIR and are summarized in the executive summary. Section 15126.2(c) of the State CEQA Guidelines requires a discussion of “significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Construction and use of the proposed Oster/Las Pilitas Quarry would irreversibly commit construction materials and non-renewable energy resources to this project. These energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods, as well as lighting and other associated energy needs. Non-renewable and slowly renewable resources used by the quarry and improvements would include, but are not limited to, lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel; copper; lead and other metals, water, etc. A marginal increase in the commitment of facility maintenance services would also be required. Primary project impacts related to consumption of non-renewable and slowly renewable resources are considered to be less than significant because buildout of the quarry would not use unusual amounts of energy or construction materials.

**SECTION 8.0
REFERENCES AND REPORT PREPARATION**

8.1 REFERENCES

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8.2 ORGANIZATIONS AND PERSONS CONSULTED

Appendix A contains the Notice of Preparation and written comments received during the scoping process for this EIR. During preparation of the EIR, the following people and agencies were consulted for further explanation and information regarding specific issues:

- San Luis Obispo County:
 - Department of Public Works:
 - Glenn D. Marshall, RCE, Development Services Engineer
 - Department of Agriculture:
 - Lynda Auchinachie, Agricultural Resource Specialist
- California Department of Transportation, District 5 (Caltrans):
 - Paul T. McClintic, PE, TE, Traffic Operations Engineer
 - Chris Schaeffer, Development Review
- San Luis Obispo County Air Pollution Control District:
 - Gary Arcemont, Air Quality Specialist
 - Aeron Arlin-Genet, Manager, Planning and Outreach Division

8.3 LIST OF ABBREVIATIONS AND ACRONYMS

ACOE	U.S. Department of the Army, Corps of Engineers
ADT	Average Daily Traffic
APCD	(San Luis Obispo County) Air Pollution Control District
APN	Assessor's Parcel Number
ATCM	Air Toxic Control Measure
BMP	Best Management Practices
CalOSHA	California Department of Industrial Relations, division of Occupational Health and Safety
CAP	Clean Air Plan

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CARB	California Air Resources Board
CBACT	Best Available Control Technology
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
COSE	Conservation and Open Space Element
CPUC	(California) Public Utilities Commission
CUP	Conditional Use Permit
CWA	Clean Water Act
dB	Decibels
DEIR	Draft Environmental Impact Report
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program (California)
GHG	Greenhouse Gas(es)
HA	Hydrologic Area
KPRA	Kingpin-to-rear-axle distance (trucks)
Ldn	Day-Night Average Level
Leq	Equivalent Noise Level
LID	Low Impact Development

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Lmax	Maximum Noise Levels
LOS	Level of Service (traffic)
LUE	General Plan Land Use Element
LUO	Land Use Ordinance (Title 22 of the County Code)
MBTA	Migratory Bird Treaty Act
MS4	Municipal Separate Storm Sewer System
ND	Negative Declaration
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NOX	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OS	Open Space
OSHA	Occupational Safety and Health Act (Federal)
PM ₁₀	10 Micron Suspended Particulates
PM _{2.5}	2.5 Micron Suspended Particulates
ROC	Reactive Organic Carbon
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SLOAPCD	(San Luis Obispo County) Air Pollution Control District
SMARA	Surface Mining and Reclamation Act (California)
SO ₂	Sulfur Dioxide
SOX	Sulfur Oxides
SR58	State Route 58
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWQP	Stormwater Quality Plan
SWRCB	State Water Resources Control Board
TCM	Transportation Control Measure

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TMDL	Total Maximum Daily Load
UBC	Uniform Building Code
UCSB	University of California, Santa Barbara
US101	U.S. Highway 101
USACE	U.S. Department of the Army, Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WDR	Waste Discharge Requirements
WPA	Water Planning Area
WSA	Water Supply Assessment

8.4 REPORT PREPARATION/LIST OF PREPARERS

This EIR was prepared by the County of San Luis Obispo, Department of Planning and Building. County staff included Murry Wilson, Environmental Resource Specialist and EIR Project Manager, and Steven McMasters, Supervising Planner.

URS Corporation served as the prime contractor for the Department of Planning and Building for preparation of the EIR. John Larson was the Project Manager for URS.

The following is a list of individuals responsible for preparation of the EIR.

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Executive Summary	John Larson
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Project Description	John Larson
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Aesthetics and Visual Resources	Renee Longman, AICP Brian R. Smith, AICP Jim Winborn
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Geology	Bill Buelow, RG
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