

**Lehigh-Hanson Quarry Extension  
Santa Margarita, CA**

**VISUAL ANALYSIS REPORT**

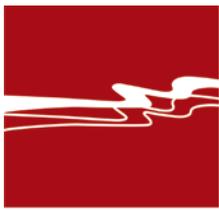
**Prepared For**



**Lehigh Hanson  
Mineral Resources Department  
7675 N. Ingram Avenue, Suite 103  
Fresno, CA 93711**

**April 24, 2012**

**Prepared By**



**612 CLARION COURT  
SAN LUIS OBISPO  
CALIFORNIA 93401  
T 805 544-4011  
F 805 544-4294  
www.wallacegroup.us**



## Table of Contents

<b>1.</b>	<b>Project Description.....</b>	<b>1</b>
<b>2.</b>	<b>Existing Conditions .....</b>	<b>1</b>
	2.1 Visual Character .....	1
	2.2 Visual Quality.....	2
<b>3.</b>	<b>Regulatory Framework.....</b>	<b>3</b>
	3.1 Land Use Policy.....	3
	3.2. Thresholds of Significance .....	3
<b>4.</b>	<b>Methodology .....</b>	<b>4</b>
<b>5.</b>	<b>Impact Assessment .....</b>	<b>5</b>
	5.1 Point of View 1- From El Camino Real.....	5
	5.2 Point of View 2- From State Route 58.....	6

### Figures:

Figure 1, Approved 1981 Reclamation Plan in Aerial View

Figure 2, Visual Key Map

Figure 3, Point of View 1, Existing View from El Camino Real

Figure 4, Point of View 1, Proposed Alteration to View from El Camino Real

Figure 5, Point of View 1, Future View from El Camino Real Before Reclamation

Figure 6, Point of View 1, Future View from El Camino Real, 15 Years Post-Reclamation

Figure 7, Point of View 2, Existing Views from State Route 58

Figure 8, Point of View 2, Proposed Alteration to View from State Route 58

Figure 9, Point of View 2, Future View from State Route 58 Before Reclamation

Figure 10, Point of View 2, Future Views from State Route 58, 15 Years Post-Reclamation

## **1. Project Description**

The proposed Santa Margarita Quarry Extension project involves an application to the County of San Luis Obispo for a Conditional Use Permit (CUP) modification and Reclamation Plan Amendment (RPA) to extend quarry operations. This proposed extension involves adding approximately 41 acres of reserves to the existing permitted 85-acre quarry site, resulting in a total area of 126 acres. Approval of this project would extend the quarry lifespan by providing additional aggregate reserves on adjacent land to the west of the existing pit. It is estimated that the currently permitted quarry reserves would be depleted in 21 years under average operations; the proposed extension would extend the life of the quarry by an additional 59 years under average conditions.

The Santa Margarita Quarry site (or “project site”) is located within the unincorporated area of San Luis Obispo County within the Santa Lucia Mountain Range approximately three miles northwest of the unincorporated town of Santa Margarita. The project ranges in elevation from 880 to 1,340 feet above sea level.

## **2. Existing Conditions**

### **2.1 Visual Character**

The 126-acre RPA boundary includes the location of the current operations and the proposed extension area of the Santa Margarita Quarry. Surrounding the site are open space, grazing and rangeland areas with scattered residences and other industrial uses. El Camino Real is a two-lane arterial to the west of the site connecting Santa Margarita with the unincorporated town of Templeton, and serves as the quarry’s point of access. Between El Camino Real and the ridgeline forming the westerly project limit are rolling hillsides and flat grassland areas. Farther to the west of El Camino Real and parallel to it runs Interstate Highway 101. The western ridge of the RPA fall within the Highway 101 Scenic Corridor.

To the south and east of the project site, State Route 58 is a two-lane highway that runs from Highway 101 through Santa Margarita and eastward to California Valley and Interstate 5. Where Highway 58 leaves Santa Margarita, it runs north toward the project site to a point roughly one mile south of the quarry, before veering off to the east and into more rugged terrain.

The overall visual character of the project site and surrounding areas is defined by the landforms, vegetation patterns and existing man-made modifications as noted above which give the project area its distinguishing rural visual qualities. The larger visual setting of the surrounding areas consists of high quality views of rolling hills, steep hillsides and broad vistas of undeveloped open space interspersed with scattered residences and other developed uses at lower elevations. In its present condition, viewers would consider the project area to be a fairly typical visual characterization of rural areas within northern San Luis Obispo County. The County of San Luis Obispo General Plan, Conservation and Open Space Element (2010) states that “scenic landscapes include typical landscapes that visually define a region of the County and

that are valued by residents and visitors. Examples include the wooded hills near Templeton.” The overall visual quality of the areas surrounding the 126-acre project site is, therefore rated as high as viewed from vantage points beyond the existing quarry operations.

The currently approved 85-acre quarry is anticipated to be depleted in approximately 21 years under average operational conditions. At that point, the westerly quarry face that is currently visible from State Route 58 will appear very similar to the existing condition shown in Figure 6, Point of View 2, but with more defined benches. Under the applicable Reclamation Plan approved in 1981, the benches would be 20 feet in width with 30 vertical feet between them. However, a bench modification approved by the County in 2005 reduced the bench width to 10 feet at 30-foot intervals, and provided a revised Revegetation Plan. See Figure 1, Approved 1981 Reclamation Plan and Aerial, to see the final pit configuration as currently entitled.

## **2.2 Visual Quality**

From within the site, views are punctuated by the steps and benches that have been the subject of granite extraction since the 1920's. Views from the project site are limited by the horizon line that is defined by steep hillsides to the west, north and east that contain oak woodland and chaparral vegetation. These adjacent ridgelines form the visual backdrop for views from the project site in these three directions. Views from the project site to the south include the existing granite processing facilities beyond which are rolling hills and grasslands leading to State Route 58. Further to the east and north of the site is the Salinas River, views of which from the project site are blocked by the intervening hillsides and ridgelines noted above.

From El Camino Real to the west, the ridgeline defining the western boundary of the proposed extension is visible in both directions from an approximately 500 foot segment of roadway, indicated as Point of View 1 in Figure 2, Visual Key Map. For travelers on El Camino Real at the speed limit of 55 miles per hour, the ridgelines defining the western project site boundary are visible for approximately 6.2 seconds. This ridgeline is included in the Scenic Highway Corridor for Highway 101 to the west of El Camino Real, but intervening topography and the 2.4-mile distance coupled with the speed of vehicular travel reduce the visibility of the project area ridgeline to glimpses along the horizon.

From State Route 58 to the south, the western face of the existing quarry pit is visible from an approximately 3,000-foot linear segment of roadway, indicated as Point of View 2. The cut face of the west quarry wall is visible directly in front of eastbound travelers; for westbound travelers the quarry is directly behind them. For Eastbound travelers on State Route 58 at the speed limit of 45 miles per hour, the duration of views of the project site is approximately 45.5 seconds.

According to the project traffic analysis, El Camino Real carries an average of 3,800 vehicles per day and State Route 58 carries an average of 1,900 vehicles per day in the vicinity of the project site. The views of the project site from each of these roadways are limited either by intervening hillsides or, in the case of Route 58, drops in roadway elevation below the surrounding grades. The project site is also visible from scattered residences on the east side of State Route 58. Photographs of existing visual conditions

from the two key vantage points are provided in Figure 2, Point of View 1, Existing Views from El Camino Real and Figure 6, Point of View 2, Existing Views from State Route 58.

### **3. Regulatory Framework**

#### **3.1 Land Use Policy**

The regulations, particularly policies contained within the San Luis Obispo County General Plan, Conservation and Open Space Element (2010), are pertinent to the assessment of visual impacts associated with the proposed project.

*County of San Luis Obispo General Plan, Conservation and Open Space Element (2010)*

Visual Resource Policy 4.1 Designation of Scenic Corridors implements the goal of protection of visual resources within visually sensitive resource areas (SRA's) for scenic corridors. Scenic Corridors are defined as "areas that have scenic or historic qualities that are visible from recognized roadways", "are view areas or 'viewsheds' from popular public roads and highways that have unique or outstanding scenic qualities" and are designated to conserve and enhance their scenic beauty." The following implementation strategies are recommended:

*Implementation Strategy VR 4.1.1:* Designate candidate roads and highways as Scenic Corridors. Highway 58 from the Santa Margarita urban reserve line to the Kern County line as well as Highway 101 are included within a list of Suggested Scenic Corridors contained within this policy.

*Implementation Strategy VR 4.1.2:* Establish scenic corridor design standards in conjunction with scenic corridor and highway designations. Regulations should be modeled after the Highway Corridor Design Standards in the Land Use Element. Guidelines and standards should address siting and building design below ridgetops, access roads, landscaping, building height, signs, lighting and outdoor advertising.

*San Luis Obispo County Design Guidelines (November 1998)*

This document, prepared by the San Luis Obispo County Department of Planning and Building, consists of "design objectives, guidelines and examples that will help retain and enhance the unique character of the unincorporated communities and rural areas of San Luis Obispo County". These grading design objectives do not apply to the project site because Objective RC-7 specifically excludes surface mining operations.

#### **3.2. Thresholds of Significance**

Aesthetic or visual impacts would be considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista. This would occur if the proposed project would significantly degrade the scenic landscape as viewed

from public roads, or in particular county or state-designated scenic roadways, or from other public areas. The degree of potential impact on scenic vistas varies with factors such as viewing distance, duration, viewer sensitivity and the visual context of the surrounding area.

- Substantially damage scenic resources, including but not limited to trees, rock outcroppings and historic buildings within a designated state scenic highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings. Project related actions would be considered to have a significant impact on the visual character of the site if they altered the area in a way that significantly changed, detracted from, or degraded the visual quality of the site and was inconsistent with community policies regarding visual character.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The project would result in a significant impact if it subjected viewers from public roads or adjacent residences to a substantial amount of point-source lighting visibility at night, or if the collective illumination of the project resulted in a noticeable spill-over effect into the nighttime sky, increasing the ambient light over the region.

In addition to the visual policies and goals defined in the County of San Luis Obispo General Plan, as outlined above, the County provides further guidance regarding the determination of potential aesthetic impact levels through the following questions from the County's Initial Study Checklist within the issue area of Aesthetics:

Will the project:

- a) Create an aesthetically incompatible site open to public view?
- b) Introduce a use within a scenic view open to the public?
- c) Change the visual character of an area?
- d) Create glare or night lighting, which may affect surrounding areas?
- e) Impact unique geological or physical features?

#### **4. Methodology**

To obtain scalable features in known locations, Story Poles measuring 10 feet square were temporarily installed at three points on the ridgeline as indicated in Figure 2, Visual Key Map. While story poles were erected, the extent of project site visibility was determined by driving along Highway 58 and El Camino Real until story poles would appear and disappear out of view. For Point of View #1, we realized an additional reference was needed to supplement Story Pole #2 which was obstructed by existing trees. A fourth reference point and scale reference was used in the form of a person standing at ridgeline, as referenced by "Reference Point 'D'" in Figure 2, Visual Key Map.

Multiple photos were taken of existing conditions with story poles erected. Photos were taken with varying amounts of "zoom" to capture typical viewing limits, as well as detailed, "zoomed-in" photos to verify height and width of story pole locations. Precise locations for story pole, reference points and final camera (Point of View) locations were recorded based on surveying instrumentation and data.

Photographs were taken from four locations and evaluated for greatest visibility. An image was selected from each of two key vantage points, designated as Points of View (POV) 1 and 2, provided in Figure 1, Visual Key Map. Base photos were then overlaid digitally with detailed photos to verify story pole locations and dimensions. Proposed quarry grading plans were studied in AutoCAD based on selected POV locations to determine profiles and ridgelines as proposed by the quarry expansion. A minimum of two visible story poles/reference points were used in each view to determine the scale of limits of quarry expansion.

The proposed grading plan was also studied in 3-D modeling software to verify the existing terrain outside of the project area that would become visible with the proposed quarry expansion. This information was critical to POV #2. The 3-D modeling software also assisted to verify the profile and ridgeline information already prepared in the previous step.

This information formed the basis for preparing simulations illustrating the extent of visual impacts of the proposed Santa Margarita Quarry Extension Project. These illustrations provide a depiction of the existing condition, the view of the site at project completion but prior to reclamation of the site, and the view of the site at project completion after reclamation of the site.

## **5. Impact Assessment**

The following assessment of visual impacts is based upon the thresholds of significance and the questions contained within the County of San Luis Obispo's Initial Study Environmental Checklist within the issue area of Aesthetics as listed above. In responding to these questions, a determination of significance for the potential environmental impacts associated with the proposed Santa Margarita Quarry Extension project can be made.

As previously noted, the ridgeline defining the western boundary of the project site is visible from an approximately 500 foot segment of El Camino Real to the west for an interval of approximately 6.2 seconds. The existing quarry site is visible from an approximately 3,000 foot segment of State Route 58 to the south for approximately 45.5 seconds. The project site is also visible from scattered residences on the east side of State Route 58. The western ridgeline of the expansion area is briefly visible from Highway 101 as part of the horizon.

Given these limited view opportunities, the illustrations provide a maximum probable ("worst case") assessment of the resulting visual impacts of the proposed project. The discussion of visual impacts is, therefore, based upon these two primary vantage points or Points of View of the project site.

### **5.1 Point of View 1- From El Camino Real**

The ridgelines defining the western boundary of the proposed project site comprise the primary topographic site feature that is visible from El Camino Real and other vantage points from the west (see Figure 3, Point of View 1, Existing View from El Camino Real).

As a result of the proposed quarry extension, a small segment (approximately 500 feet) of the western ridgeline facing El Camino Real will be removed from the back side of the ridge (see Figure 4, Point of View 1, Proposed Alteration to View from El Camino Real). This image represents maximum extent of potential project impacts upon views from this area. Due to the viewing angle of the topographic change, a short section of the existing horizon will be slightly lower as viewed from this direction at project completion, and reclamation will not affect the appearance of the modified area. This is due to the distance of the impacted ridgeline (approximately one mile) from El Camino Real (see Figure 5, Point of View 1, Future View From El Camino Real Before Reclamation). Although Highway 101 shares this line-of-sight, the view of the impacted ridgeline from the highway is significantly reduced due to the intervening distance of approximately 2.4 miles. The visual impact of this ridgeline alteration from Highway 101 is considered to be less than significant.

This visual change will not create “an aesthetically incompatible site open to public view” since the lowered ridgeline would be replaced by a clear and unobstructed view of the horizon. No additional structures or other uses will be established either on the impacted ridgeline or in any other areas visible from west of the project site, particularly from El Camino Real. As such, this visual change is considered minimal and will not alter the visual character of the area. Since all project activity will occur on the opposite side and below the western ridgeline of the site, no glare or night lighting impacts will be created which may impact surrounding areas. This topographic change will not impact any unique geological resources. In total, the potential visual impacts of the proposed project from vantage points to the west are considered to be less than significant.

The Reclamation Plan to be implemented at project completion will add vegetation to disturbed areas near the western project boundary (see Figure 6, Point of View 1, Future View from El Camino Real, 15 Years Post-Reclamation). This additional vegetation will reinforce and be compatible with the existing rural character of the area. Because the altered section of slope faces away from the viewpoint, there will be little to no visual change in views from the west with revegetation.

## **5.2 Point of View 2- From State Route 58**

The western side of the existing quarry operations is visible along roughly 3,000 linear feet of State Route 58 to the south. Views of the site are otherwise blocked by intervening rolling hills and vegetation (see Figure 7, Point of View 2, Existing Views from State Route 58). The south-facing slopes of the project site visible from State Route 58 have undergone significant alteration and vegetation removal as a result of prior and ongoing quarry operations. As previously noted, under the current entitlement, the extent of exposed quarry face will be similar to the current view at full depletion of the existing quarry reserves.

As a result of the proposed quarry extension, approximately half of the exposed slope visible from POV-2 will be removed (see Figure 8, Point of View 2, Proposed Alteration to View from State Route 58). This view represents the maximum extent of alteration to views from areas to the south. The proposed project would begin removing the northerly portion of the west wall of the mine pit beginning in Phase I as the pit is extended to the northwest, reducing the visual impact of the current view from POV-2 beginning as early as 2014. Ongoing mining operations would continue to reduce the west wall's visibility throughout the extended life of the operation. The width of proposed benches are slightly

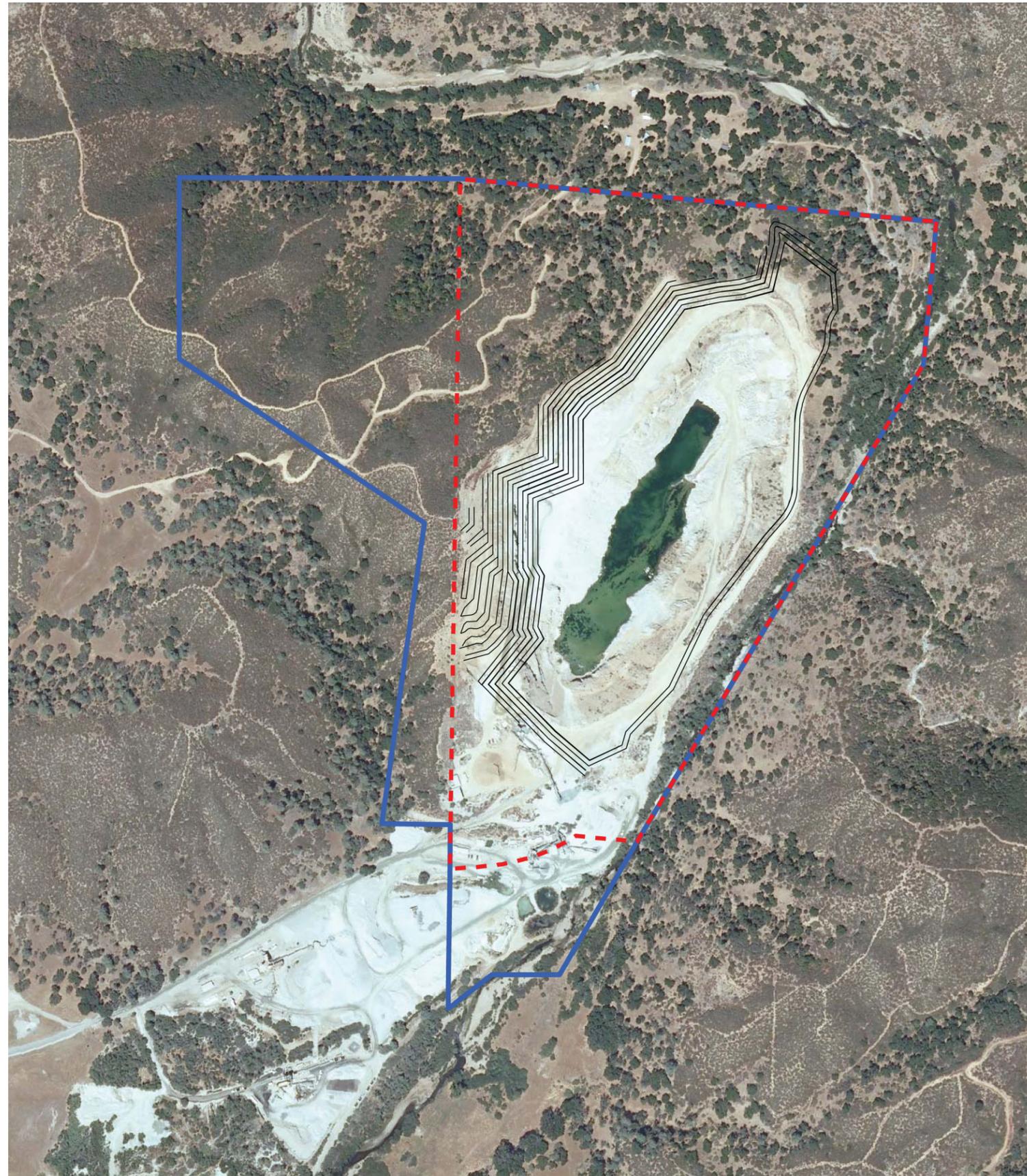
wider (25') in the proposed plan, potentially allowing for more screening vegetation than the 1981 reclamation plan at 20 feet and the 2005 bench modification at 10 feet in width.

Mining into the proposed extension area will significantly reduced visibility of the west quarry slope wall and reveal a portion of the expansion area's new north wall (see Figure 9, Point of View 2, Future View from State Route 58 Before Reclamation). As a result, the views of this ridgeline and exposed slope will be partially replaced with views of the distant hillsides and open space areas to the north and east of the site. Under the current entitlement, the exposed west wall would remain substantially the same until reclamation begins in approximately 2032; with the project, reduction of the exposed cut face would begin as early as 2014.

Since the proposed quarry extension will not alter the nature of quarry activity, little change in glare or night lighting impacts will occur that may impact surrounding views. The extent of topographic alteration could be considered a significant impact upon a unique geological or physical feature, and the extent of topographic alteration that is visible from the south may be considered a significant alteration of the visual character of the area. However, the change could be considered beneficial because the project would result in reducing the visibility of a highly disturbed cut slope and the change would occur sooner than would reclamation under the current entitlement.

The proposed Reclamation Plan Amendment to be implemented at project completion will add vegetation to the exposed quarry slope that remains visible from Highway 58. Two feet of soil would be overlaid on the benches, planted with a seed mix of chaparral and scrub species matching the existing vegetation to help minimize the impact of the exposed slope over time (see Figure 10, Point of View 2, Future Views from State Route 58, 15 Years Post-Reclamation). The Reclamation Plan found that the southeasterly slope in this location may be unsuitable for supporting oaks due to intense solar heat and reflectivity; however, chaparral is expected to thrive.

The proposed project's reduction in the visible expanse of exposed slope combined with the revegetation described in the Reclamation Plan Amendment can reduce the potentially significant impacts upon the visual character of the area and unique geological or physical features to a level of insignificance.



LEGEND

- 1981 RP Proposed Topo
- ▭ Proposed Quarry Extension RPA Boundary
- - - 1981 Rec. Plan Boundary



250 500  
Feet  
inch = 500 feet

1981 Topo: Chang Engineering  
Biology: WRA  
Aerial: 2010 USDA

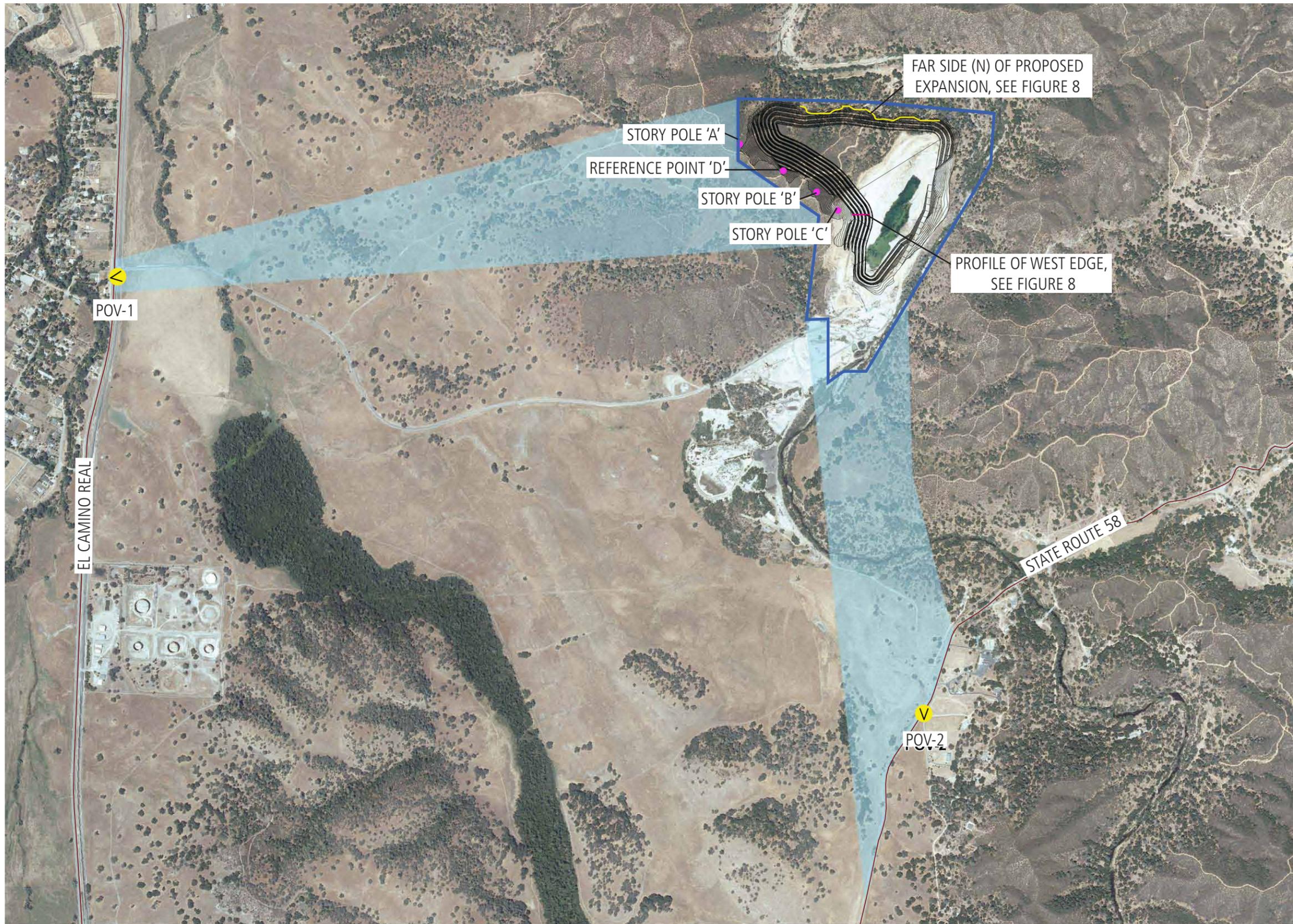




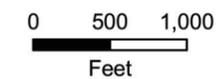
WALLACE GROUP

LEGEND

- Camera Locations
- Visibility from Roads
- Roads
- Proposed Pit Topo
- Project Boundary



North



1 inch = 1,000 feet

Date: April 2012  
 Camera Locations: Wallace  
 Pit Topo: Chang Engineering  
 Roads: SLO County  
 Aerial: 2010 USDA



**LEHIGH-HANSON QUARRY EXTENSION**  
 SANTA MARGARITA, CA

**FIGURE 2**  
 VISUAL KEY MAP

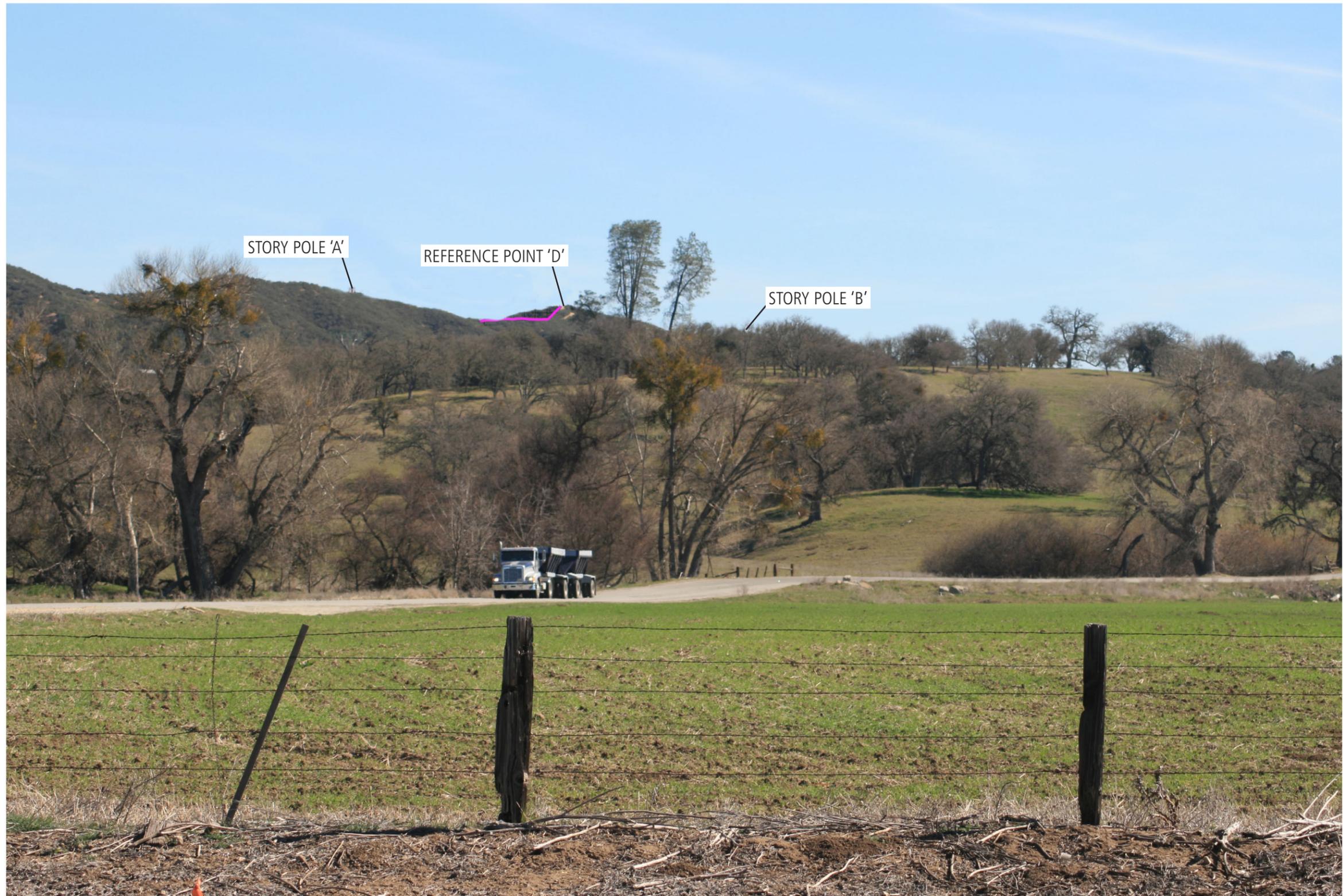


WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 3**  
POINT OF VIEW 1  
EXISTING VIEWS FROM EL CAMINO REAL



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 4**  
POINT OF VIEW 1  
PROPOSED ALTERATION TO EXISTING VIEW FROM EL CAMINO REAL



WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 5**  
POINT OF VIEW 1  
FUTURE VIEW FROM EL CAMINO REAL BEFORE RECLAMATION



WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 6**  
POINT OF VIEW 1  
FUTURE VIEW FROM EL CAMINO REAL, 15 YEARS POST-RECLAMATION



WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 7**  
POINT OF VIEW 2  
EXISTING VIEWS FROM STATE ROUTE 58



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 8**  
POINT OF VIEW 2  
PROPOSED ALTERATION TO EXISTING VIEW FROM STATE ROUTE 58



WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 9**  
POINT OF VIEW 2  
FUTURE VIEW FROM STATE ROUTE 58 BEFORE RECLAMATION



WALLACE GROUP



**LEHIGH-HANSON QUARRY EXTENSION**  
SANTA MARGARITA, CA

**FIGURE 10**  
POINT OF VIEW 2  
FUTURE VIEW FROM STATE ROUTE 58, 15 YEARS POST-RECLAMATION