Riverside County Conformance

"Mineral deposits in the County are important to many industries, including construction, transportation and chemical processing. The value of mineral deposits within the County is enhanced by their close proximity to urban areas. However, these mineral deposits are endangered by the same urbanization that enhances their value.

The non-renewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources, in order to prevent the unnecessary waste of these deposits due to careless exploitation and uncontrolled urbanization. Management of these mineral resources will protect not only future development of mineral deposit areas, but will also guide the exploitation of mineral deposits so that adverse impacts caused by mineral extraction will be reduced or eliminated."

- County of Riverside General Plan
(Section - Non-Renewable Resources 'Mineral Resources')

Analysis of SMP 139R1 Consistency with the Riverside County General Plan & Temescal Canyon Area Plan Land Use Designations and Ordinance 348

The subject site lies specifically within the Temescal Canyon Area Plan of the County of Riverside's General Plan, and does not fall within a General Plan Policy Area (as evidenced by the October 2003 County of Riverside General Plan - Temescal Canyon Area Plan - Policy Area Map (Figure 4/Page 31)) or a General Plan Policy Overlay Area. Riverside County's General Plan and the Temescal Canyon Area Plan list the Land Use Designation for the subject site as "Open Space - Mineral Resources (OS-MIN)," which allows for the currently permitted use of mineral extraction and processing facilities. This application is proposing to extend the life of the currently permitted reserves as well as expand the permitted reserves to include the reserves currently within the slopes and setbacks between the subject site and the contiguous Surface Mining Permits (SMP). Said application is designed to conform to the current "Open Space - Mineral Resources (OS-MIN)" Designation and will not require an amendment to the General Plan. In addition, the subject site is zoned "M-R-A (Mineral Resources and Related Manufacturing)" per its Ordinance 348 Zoning Designation, which allows for *"Mining, quarrying, excavating, beneficiating, concentrating, processing, and stockpiling of rock, sand, gravel, decomposed granite, clay, gypsum, limestone, metallic ores, and similar materials, and the rehabilitation of the resulting excavations*." As such, mining activities proposed as part of the SMP 139R1 project would be fully compatible with the site's current zoning designation.

The proposed Inert Debris Engineered Fill Operation (IDEFO) would be the primary mechanism for implementing our required reclamation for the subject site. Part of this application will be proposing an IDEFO as a key component to our reclamation activities. The Riverside County General Plan notes that the OS-MIN land use designation allows for "Ancillary structures or uses...which assist in the extraction, processing, or preservation of minerals" (Riverside County General Plan, Page LU-53). The IDEFO operation is necessary for the ultimate reclamation of the site as detailed in the proposed Reclamation Plan; the Reclamation Plan is, in turn, a required element of surface mining permits pursuant to SMARA and County Ordinance 555. Thus, the IDEFO operation is necessary to "...assist in the extraction...of minerals." Additionally, the proposed IDEFO operation is a permitted use pursuant to Section 12.60.b.(1) of Ordinance 348, which indicates that the M-R-A zone allows for *"Mining, quarrying, excavating, beneficiating, concentrating, processing, and stockpiling of rock, sand, gravel, decomposed granite, clay, gypsum, limestone, metallic ores, and similar materials, and the rehabilitation of the resulting*

excavations." Since the IDEFO operation is necessary for the "rehabilitation of the resulting excavations," as required by SMARA and County Ordinance 555, the IDEFO is a permitted use pursuant to Ordinance 348. Therefore, with the IDEFO as a compatible use to implement ultimate reclamation of the site, the proposed application will conform to the current General Plan Designation of Open Space Mineral (OS-MIN) and the current M-R-A zoning and no changes will be required.

Therefore, the proposed SMP139 Revision application (inclusive of the IDEFO operation) complies with the currently permitted uses as allowed in the County Zoning Ordinance and the Riverside County General Plan.

Analysis of SMP 139R1 Consistency with Applicable General Plan Policies – Land Use Element

The Riverside County General Plan and Temescal Canyon Area Plan list the land use designation as Open Space Mineral (OS-Min) for the subject site. The following policies from the General Plan Land Use Element are therefore applicable to the SMP 139 Revision:

LU 21.1 "Require that surface mining activities and lands containing mineral deposits of statewide or of regional significance comply with Riverside County Ordinances and the SMARA." The subject site currently and historically has operated within all provisions required by SMARA and the Riverside County Development Code. The proposed SMP139 Revision will help the applicant to continue to operate under the local and state guidelines and requirements while actually lowering the amount of reclamation needed to restore the subject site. This will occur by filling the current mine site through an engineered fill operation (IDEFO) which will eventually remove slopes and raise the current grade. The proposed IDEFO operation is necessary to ensure compliance with Riverside County Ordinance 555. Specifically, the IDEFO materials, acting as fill material, would be used to facilitate the "...potential uses of the reclaimed site" (as required by Section 6.b of Ordinance 555), and would be necessary to help assure the stability of reclaimed slopes (as required by Section 6.e of Ordinance 555). The IDEFO materials also are needed to preclude "...drainage and erosion problems..." and would ensure the resulting site is "coordinated with present and anticipated future land uses and compatible with the topography and general environment of surrounding property" (in conformance with Section 6.g of Ordinance 555). Accordingly, the SMP 139 Revision is consistent with Policy LU 21.1.

LU 21.2 "Protect lands designated as Open Space-Mineral Resource from encroachment of incompatible land uses through buffer zones or visual screening." The SMP 139 Revision consists of a proposal to extend an existing mining operation and allow for the operation of an IDEFO, both of which are compatible with the OS-MIN General Plan land use designation. Accordingly, the SMP 139 Revision is consistent with Policy LU 21.2.

LU 21.3 "Protect road access to mining activities and prevent or mitigate traffic conflicts with surrounding properties." As part of the SMP 139 Revision, easements would be placed over Maitri Road to ensure continued access to adjacent mining sites. Additionally, a traffic impact analysis was prepared by Urban Crossroads and is discussed in the SMP 139 Revision Mitigated Negative Declaration (MND). The MND sets forth mitigation measures to reduce cumulatively significant traffic impacts to a level below significant. Mitigation measures identified in the MND would be enforced by Riverside County as part of the conditions of approval imposed on SMP 139R1. Accordingly, the SMP 139 Revision is consistent with Policy LU 21.3.

LU 21.4 "Require the recycling of mineral extraction sites to open space, recreational, or other uses that are compatible with the surrounding land uses." As part of the SMP 139R1 project, a Reclamation Plan has been prepared that would require ultimate reclamation of the site in a manner compatible with surrounding land uses. Accordingly, the SMP 139 Revision is consistent with Policy LU 21.4.

LU 21.5 "Require an approved reuse plan prior to the issuing of a permit to operate an extraction operation." As part of the SMP 139R1 project, a Reclamation Plan has been prepared that would require ultimate reclamation of

the site and return it to open space. Grading required as part of the Reclamation Plan would facilitate future uses of the site, although no such uses are identified at this time. Accordingly, the SMP 139 Revision is consistent with Policy LU 21.5.

Analysis of SMP 139R1 Consistency with Applicable General Plan Policies – Open Space

Policy OS 14.1 "Requires that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and County development Code provisions." The subject site currently and historically has operated within all provisions required by SMARA and the Riverside County Development Code. The proposed SMP139 Revision will help the applicant to continue to operate under the local and state guidelines and requirements while actually lowering the amount of reclamation needed to restore the subject site. This will occur by filling the current mine site through an engineered fill operation (IDEFO) which will eventually remove slopes and raise the current grade. The proposed IDEFO operation is necessary to ensure compliance with Riverside County Ordinance 555. Specifically, the IDEFO materials, acting as fill material, would be used to facilitate the "...potential uses of the reclaimed site" (as required by Section 6.b of Ordinance 555), and would be necessary to help assure the stability of reclaimed slopes (as required by Section 6.e of Ordinance 555). The IDEFO materials also are needed to preclude "...drainage and erosion problems..." and would ensure the resulting site is "coordinated with present and anticipated future land uses and compatible with the topography and general environment of surrounding property" (in conformance with Section 6.g of Ordinance 555). Accordingly, the SMP 139 Revision is consistent with Policy OS 14.1.

Policy OS 14.2 "Restricts incompatible land uses within the impact area of existing or potential surface mining areas." The SMP139 Revision is a continuation of the currently permitted and compatible use. The IDEFO is consistent with site's existing zoning designation of "M-R-A Zone, which pursuant to Ordinance 348, Article XIIb-, Section 12.60 (b) (1), requires the "rehabilitation of the resulting excavations" due to "mining, quarrying, excavating...of rock sand, gravel...". Per Ordinance 555, Section 1 (b), the IDEFO will ensure that "mined lands will be reclaimed to a useable condition" by acting as the primary mechanism for implementing final reclamation of the property per SMARA.

The proposed project also would be consistent with all zoning and General Plan designations surrounding the site. These zoning designations include the following: M-R-A to the west; M-R-A and "Natural Assets (N-A)" to the south; "Specific Plan Zone (SP Zone)" to the east; and SP Zone, "Manufacturing-Service Commercial (M-SC)," "Commercial Office (C-O)," and "Mobile Home Subdivisions & Mobile Home Parks (R-T)" to the north. General Plan designations surrounding the proposed site are consistent with the underlying zoning designations and include the following: OS-MIN to the west; OS-MIN to the south; "Open Space – Conservation (OS-C)," "Open Space Recreation (OS-R)," and "Medium Density Residential (MDR)" to the east; and "Light Industrial (LI)," "Business Park (BP)," and "Medium High Density Residential (MHDR)" to the north. The SMP 139 Revision represents the continuation of an existing mining operation, and mining operations proposed as part of the Project would be shifted westerly as compared to the currently permitted mining areas. Furthermore, mining activities proposed as part of the Project would be consistent with the M-R-A zoning designations to the west and south, and would not conflict with the N-A zoning designation to the southwest. Proposed mining activities also would be consistent with the M-SC designation to the north. With respect to the Sycamore Creek Specific Plan located to the east of the Project site, adequate buffers and an earthen berm are provided or are planned by the Sycamore Creek developer along the western boundary of the Sycamore Creek Specific Plan to ensure that land use conflicts would not occur between the existing and proposed residential land uses and proposed mining operations. The site also is adequately buffered from the existing residential uses and planned commercial office uses to the north, due the intervening Temescal Canyon Road and planned business park/light industrial uses along the southern edge of Temescal Canyon Road. Accordingly, the proposed Project would be compatible with surrounding zoning designations

Therefore, the SMP 139 Revision is consistent with Policy OS 14.2.

Policy OS 14.3 "Restricts land uses incompatible with mineral resources recovery within areas designated Open Space-Mineral Resources." The OS-MIN land use designation allows for the currently permitted and proposed uses of mineral extraction and processing facilities. The Riverside County General Plan also notes that the OS-MIN land use designation allows for "Ancillary structures or uses...which assist in the extraction, processing, or preservation of minerals" (Riverside County General Plan, Page LU-53). The IDEFO operation is necessary for the ultimate reclamation of the site as detailed in the proposed Reclamation Plan; the Reclamation Plan is, in turn, a required element of surface mining permits pursuant to SMARA and County Ordinance 555. Thus, the IDEFO operation is necessary to "...assist in the extraction...of minerals." Therefore, all uses proposed as part of the SMP 139R1 project would be fully consistent with the site's OS-MIN land use designation. Accordingly, the SMP 139 Revision is consistent with Policy OS 14.3.

Policy OS 14.4 "Imposes conditions as necessary on mining operations to minimize or eliminate the potential adverse impacts of mining operations on surrounding properties, and environmental resources". Impacts of proposed mining operations on surrounding properties and environmental resources were fully evaluated as part of the SMP 139R1 Mitigated Negative Declaration (MND). Where impacts were identified, mitigation measures were imposed to reduce such impacts to a level below significance. Mitigation measures specified in the MND would be enforced by Riverside County as part of the SMP 139R1 conditions of approval. Therefore, with mandatory compliance with the MND mitigation measures, the SMP 139 Revision will not result in adverse impacts to surrounding properties or environmental resources. Accordingly, the SMP 139 Revision is consistent with Policy OS 14.4.

Policy OS 14.5 "Requires that new non-mining land uses adjacent to existing mining operations be designed to provide a buffer between the new development and the mining operations. The buffer distance shall be based on an evaluation of noise, aesthetics, draining, operating conditions, biological resources, topography, lighting, traffic, operating hours, and air quality." Both the SMP139 Revision and IDEFO are mining related uses that are specifically tied together under the reclamation plan as governed by SMARA. Therefore, the proposed SMP139 Revision and IDEFO will not create any new non-mining land uses adjacent to the existing mining operations. Accordingly, the SMP 139 Revision is consistent with Policy OS 14.5.

Policy OS 14.6 "Accept California Land Conservation (Williamson Act) contracts on land identified by the state as containing significant mineral deposits subject to the use and acreage limitations established by the County." All parcels contained within the SMP139 Revision application are not contracted within the Williamson Act Program, and no Williamson Act contracts are proposed. Accordingly, the SMP 139 Revision would not conflict with Policy OS 14.6.

Analysis of SMP 139R1 Consistency with Ordinance 348

Riverside County Ordinance 348, "Article XIIb M-R-A Zone (Mineral Resources and Related Manufacturing) Section 12.60 – Uses Permitted" is the zoning designation for the project site. Section 12.60 (a.) Uses Permitted is not applicable as this application pertains to subsection (b.).

Section 12.60. (b.) Uses Permitted. *The following uses are permitted in conformance with the development and performance standards of the article, provided that the operator thereof holds a permit to conduct surface mining operations, issued pursuant to County Ordinance No. 555, which has not been revoked or suspended:*

> *(1) Mining, quarrying, excavating, beneficiating, concentrating, processing, and stockpiling of rock, sand, gravel, decomposed granite, clay, gypsum, limestone, metallic ores, and similar materials, and the rehabilitation of the resulting excavations.*

Statement of Responsibility

The California Surface Mining and Reclamation Act (SMARA) of 1975, Section 2779 states, "Whenever one operator succeeds to the interest of another in any uncompleted surface mining operation by sale, assignment, transfer, conveyance, exchange, or other means, the successor shall be bound by the provisions of the approved reclamation plan and the provisions of this chapter."

As a representative for **Mayhew Aggregates and Mine Reclamation**, I certify that the information contained in this Reclamation Plan application is correct to the best of my knowledge and that all of the owners of possessory interest in the property in question have been notified of the proposed uses or potential uses of the land after reclamation. I also certify that **Mayhew Aggregates and Mine Reclamation** will accept all responsibility for the reclamation of mined lands associated with this site:

Assessor's Parcel Numbers: 290-060-043, 290-110-012, -015, -017, -019, -024, -025

Containing approximately 215 acres.

In accordance with the approved Surface Mining and Reclamation Plan and within the time limits of said plan.

Executed on this_____ day of _____, 2011

_____
Signature of Company Representative

_____
Print Name

MITIGATED NEGATIVE DECLARATION

SURFACE MINING PERMIT REVISION (SMP 139R1)

MAYHEW AGGREGATES & MINE RECLAMATION

LEAD AGENCY:
COUNTY OF RIVERSIDE
PLANNING DEPARTMENT
4080 LEMON STREET, 12TH FLOOR
RIVERSIDE, CA 92501

PROJECT APPLICANT:
MAYHEW AGGREGATES & MINE RECLAMATION
P.O. BOX 77850
CORONA, CA 92877

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TUSTIN, CA 92780
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AUGUST 7, 2013

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1.0 INTRODUCTION

1.1 DOCUMENT PURPOSE

This introduction is included to provide the reader with general information regarding: 1) the history of the proposed Project site; 2) standards of adequacy for a MND under the California Environmental Quality Act (CEQA); 3) a summary of Initial Study findings supporting the Lead Agency's (County of Riverside) decision to prepare a Mitigated Negative Declaration (MND) for the proposed Project; 4) a description of the format and content of this MND; and 5) the governmental processing requirements to consider the proposed Project for approval.

1.2 HISTORY OF THE PROPOSED PROJECT SITE

The proposed Project consists of the consolidation of three separate and previously approved entitlements: Surface Mining Permit 139 (SMP 139), Reclamation Plan 106 ("RCL 106"), and Plot Plan 1828 (PP 1828). These existing entitlements, which were obtained when the site was under separate ownership, allow for the operation and eventual reclamation of a surface mine on approximately 215 acres located at 24890 Maitri Road in Riverside County, California, near the city of Corona.

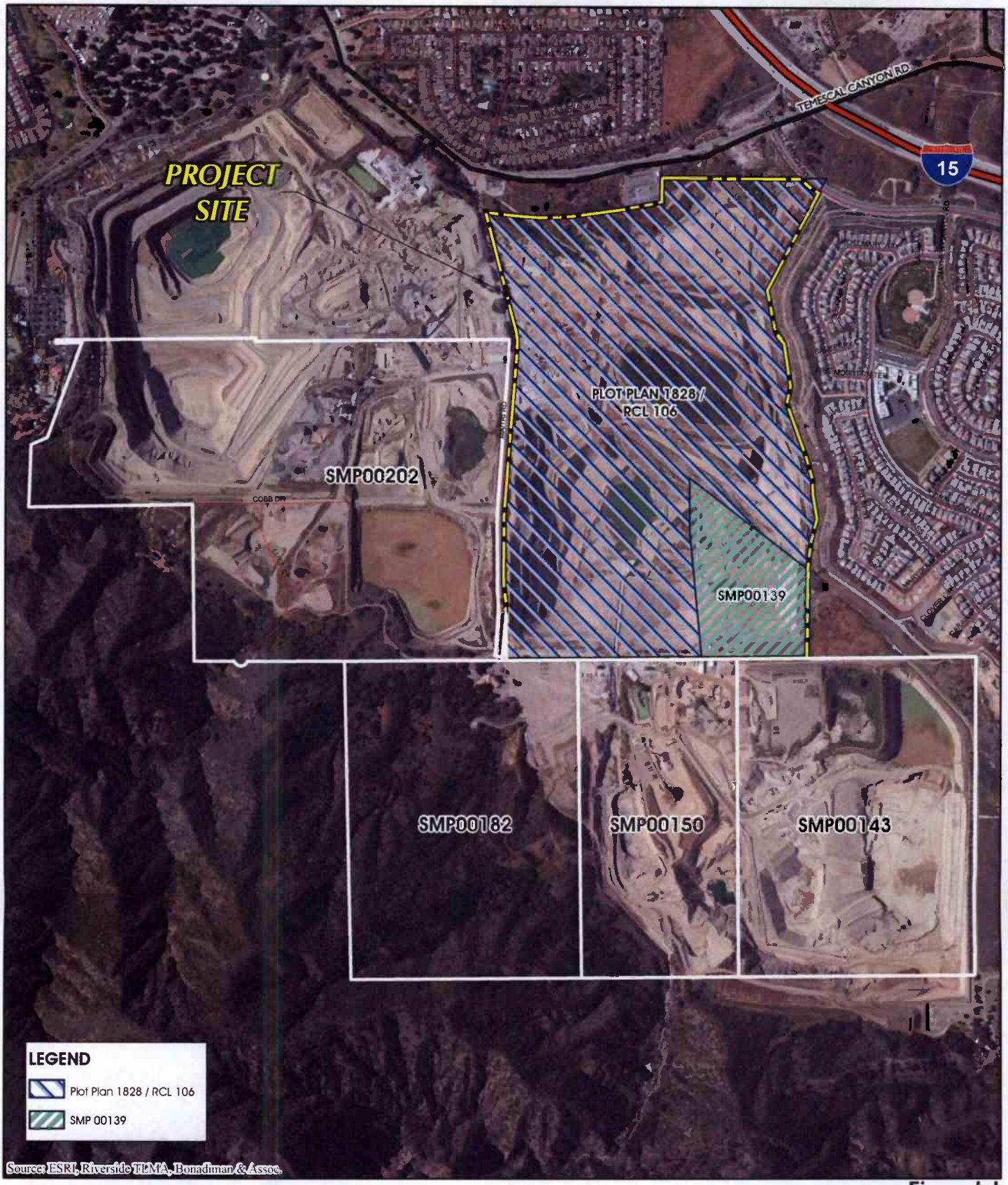
C.L. Pharris was the original operator of the site, and permitted the site under PP 1828 in 1975. In 1978, to satisfy the requirements of the Surface Mining and Reclamation Act (SMARA), a Reclamation Plan was prepared for the mining operations approved under PP 1828, and was ultimately approved by Riverside County as RCL 106.

In 1982, an area just outside the southeast corner of PP 1828 was added as Surface Mining Permit 139 ("SMP 139"), with the disturbance created by SMP 139 added to the area to be reclaimed under RCL 106. SMP 139 and RCL 106 do not have expiration dates, but PP 1828 currently has an expiration date in January 2018.

Figure 1-1, *Location of Existing Entitlements (PP 1828, RCL 106, and SMP 139)*, depicts the location of these existing entitlements. As shown, PP 1828 and RCL 106 cover the majority of the site, while SMP 139 addresses the southeastern portion of the site. For purposes of discussion herein, the areas addressed by SMP 139, RCL 106, and PP 1828 are referred to as the "proposed Project site."

In January/February 2005, heavy rains, combined with geological movement along the Glen Ivy Fault line, caused the bank between the Mayhew Creek and the SMP 139 pit wall to substantially erode and partially collapse into the SMP 139 mining pit[1]. As a result, flows from Mayhew Creek began to discharge immediately into the SMP 139 gravel pit and created instability issues with respect to the southern slopes of the mining pit. In order to address this emergency condition, in early 2005 the mining operator constructed a concrete down-drain structure measuring approximately 300 feet in length along the southern pit wall of the SMP 139 site. The intent of this down-drain structure was to stabilize the southern pit wall against water erosion hazards. With completion of the down-drain structure, flows from the Mayhew Creek were fully detained within the SMP 139 pit and no longer were conveyed downstream to the Temescal Wash. However, it should be noted that based on an analysis conducted by Chang Consultants (refer to Technical Appendix K), under historic conditions a majority of the runoff traversing the Project site infiltrated into the groundwater table, including all runoff during the 2- to 25-year storm events. Thus, during most storm events, runoff from the site did

[1]Letter to CEMEX Construction Materials, L.P., Army Corps of Engineers, July 21, 2005 (Appendix J)



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0 250 500 1,000 Feet

Figure 1-1

LOCATION OF EXISTING ENTITLEMENTS

not reach the Temescal Wash, and was instead infiltrated into the groundwater table. Runoff historically reached downstream tributaries only during 50- and 100-year storm events (with a 1 to 2 percent chance of such storm events occurring during any given year). Thus, although the construction of the down-drain structure and associated detention within the SMP 139 pits inhibited (and continues to inhibit) the ability of negligible flows from Mayhew Creek from being conveyed to downstream areas, runoff from the Project site that historically reached the Temescal Wash contributed only an extremely minor part of the overall runoff from the entire Temescal Wash watershed and only contributed such flows during 50- and 100-year storm events.

1.3 PROJECT SUMMARY

The proposed Project consists of an application for a Surface Mining Permit Revision (SMP 139R1). SMP 139R1 proposes to consolidate the existing permits (PP 1828, RCL 106, and SMP 139) under a single, comprehensive entitlement for the property; to reduce the permitted annual tonnage allowed at the mine from 5,000,000 tons per year to 2,000,000 tons per year; to reconfigure areas subject to mining activities on-site to include the existing slopes and setback areas located along the western and southern boundaries of the site; and to extend the expiration date of the existing permits from January 2018 to December 31, 2068.

In addition, it should be noted that mining of the existing slopes and setback areas along the western and southern boundaries of the site cannot be accomplished without simultaneously mining the off-site portions of the slopes and setback areas; however, mining of the off-site slopes and setback areas would require future discretionary approvals to revise the existing mining permits affecting these areas (SMPs 143, 150, 182, and 202). Nonetheless, mining of the off-site impact areas is a reasonably foreseeable consequence of the proposed Project, and impacts related to mining of these areas are evaluated throughout this MND. For purposes of discussion within this MND, "proposed Project site" or "on-site" areas refer to the existing limits of the SMP 139 site (including on-site portions of the setbacks), while "off-site impact areas" or "off-site" areas refer to areas located outside of the SMP 139 site (i.e., areas that would be impacted within SMPs 143, 150, 182, and 202 (refer to Figure 1-1 and Figure 3-4). References to "proposed Project" refer to mining activities that would be permitted by, or that would be a reasonable consequence of, proposed SMP 139R1.

SMP 139R1 also would allow for the operation of an Inert Debris Engineered Fill Operation ("IDEFO"), which would facilitate ultimate reclamation of the site by allowing for the import and on-site processing of inert construction debris.

Please refer to Section 3.0, *Project Description*, for a comprehensive description of the proposed Project.

1.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

1.4.1 CEQA Objectives

The principal objectives of CEQA are to: 1) inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities; 2) identify the ways that environmental damage can be avoided or significantly reduced; 3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and 4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.4.2 CEQA Requirements for Mitigated Negative Declarations (MNDs)

A Mitigated Negative Declaration (MND) is a written statement by the Lead Agency briefly describing the reasons a proposed project, which is not exempt from the requirements of CEQA, will not have a significant effect on the environment and therefore does not require preparation of an Environmental Impact Report (EIR). (CEQA Guidelines § 15371) The CEQA Guidelines require the preparation of a MND if the Initial Study prepared for a project identifies potentially significant effects, but: 1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed MND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and 2) there is no substantial evidence, in light of the whole record before the Lead Agency, that the project as revised may have a significant effect on the environment. If the potentially significant effects associated with a project cannot be mitigated to a level below significance, then an EIR must be prepared. (CEQA Guidelines § 15070[b])

1.4.3 Initial Study Findings

Appendix A to this MND contains a copy of the Initial Study that was prepared for the proposed Project pursuant to CEQA and County of Riverside requirements (Riverside County Initial Study/Environmental Assessment No. 42476). The Initial Study determined that implementation of the proposed Project would not result in any significant environmental effects under the impact areas of aesthetics, agriculture/forest resources, air quality, cultural resources, geology/soils, greenhouse gas emissions, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, or utilities/service systems. The Initial Study determined that the proposed Project would result in potentially significant effects to the following issue areas, but the applicant has agreed to incorporate mitigation measures that would avoid or mitigate the effects to a point where clearly no significant effects would occur: biological resources and transportation/traffic. The Initial Study determined that, with the incorporation of mitigation measures, there is no substantial evidence, in light of the whole record before the Lead Agency (County of Riverside), that the Project as revised may have a significant effect on the environment. Therefore, and based on the findings of the Initial Study, the County of Riverside determined that a MND shall be prepared for the proposed Project pursuant to CEQA Guidelines § 15070(b).

1.4.4 CEQA Requirements for Environmental Setting and Baseline Conditions

CEQA Guidelines § 15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "...the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced..." (CEQA Guidelines § 15125[a]) In the case of the proposed Project, the Initial Study determined that an MND is the appropriate form of CEQA compliance document, which does not require a Notice of Preparation (NOP). Thus, the environmental setting for the proposed Project is the approximate date that the Project's environmental analysis commenced. While this MND also addresses some historical background information regarding physical changes in the Project site and Mayhew Creek relating to the storm events of January and February 2005, this information is provided for informational purposes, only. As required under CEQA, aside from specifics related to the historic production averages for the operating mine, as discussed in more detail below, the Project baseline is the approximate date when the environmental analysis for the Project commenced, which is early 2010. In addition, any attempt to compare the Project's impacts with what existed before the 2005 physical changes in the Project site and Mayhew Creek would be speculative and misleading. Such an analysis is based upon historical records and hydrological assumptions, rather than actual current data, which can be measured directly and not hypothetically.

The Project Applicant submitted applications to Riverside County for the proposed Project in early 2010, at which time the County commenced environmental analysis. Accordingly, the environmental setting for the proposed Project is defined as the physical environmental conditions on the proposed Project site and in the vicinity of the proposed Project as they existed in early 2010.

CEQA Guidelines § 15125 further clarifies that the environmental setting "...will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." California courts have held that by using the qualifying term, "normally," § 15125 recognizes that in appropriate situations a lead agency has the discretion to select a different baseline method that accounts for the circumstances presented. (*See Fat v. County of Sacramento [2002] 97 Cal.App.4th 1270, 1278.*) In the case of mining projects specifically, the courts have held that the established usage of the property (i.e., historic production averages for the operating mine) may be considered to define the environmental setting. (See *San Joaquin Raptor Rescue Center v. County of Merced [2007] 149 Cal.App.4th 645, pg. 659.*) Because the amount of material that mining operators mine and quarry is driven by supply and demand market forces that vary from year to year, the courts have ruled that it is appropriate to consider conditions over a range of time periods to establish a production volume average. (See *Hansen Brothers Enterprises, Inc. v. Board of Supervisors [1996] 12 Cal.4th 533, 48 Cal.Rptr.2d 778; 907 P.2d 1324;* and *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors, supra, 87 Cal.App.4th at p. 125.)* The environmental setting for a long-operating mine must take into account the historical averages, because using only a single year of production values would be "misleading and illusory." (See *Fairview Neighbors v. County of Ventura [1999] 70 Cal.App.4th 238.*) However, the existing baseline conditions must also be representative of the mine's actual operations (acknowledging latitude where operations fluctuate), and not be based merely on theoretical conditions, such as a theoretical maximum allowed under an approved permit that has not actually been realized based on historical data. (*See Communities for a Better Environment v. South Coast Air Quality Management District, et al. [2010] 48 Cal.4th 310.*)

In consideration of State CEQA requirements and applicable California case law for establishing the existing baseline conditions against which Project impacts can be evaluated, the Riverside County Planning Department determined that 15 years of historical mine production data is an adequate and appropriate time span to determine average production volumes and calculate the historical average. In the case of this particular analysis, 15 years is appropriate because it spans a time period of 1995 – 2009 when Southern California recovered from an economic recession, experienced strong economic growth, and then fell back into a recession[2]. Because the mine primarily supplies materials used in new construction, a time period encompassing 1995-2009 is representative of a full economic cycle in the mine's supply area.

Based on available, recorded tonnage records provided by the Project Applicant, mining operations within the areas governed by Surface Mining Permit 139 (SMP 139) and Plot Plan 1828 (PP 1828) generated an average of 1,514,801 tons per year between 1995 and 2009 (refer to Table 1-1). As shown in the table, production quantities increased from 1995 to 2003 when southern California was experiencing economic recovery and growth, then fell sharply beginning in 2008 due to a severe economic recession that substantially slowed the demand for construction materials, including aggregate materials produced at the proposed Project site.

[2] National Bureau of Economic Research, 2012. Business cycling data available at: http://www.nber.org/.

1.4.5 Format and Content of this Mitigated Negative Declaration

This MND, in conjunction with the Environmental Assessment/Initial Study Checklist ("Initial Study") prepared to evaluate the proposed Project's potential to result in significant environmental effects, the Mitigation Monitoring and Reporting Program (MMRP), and the technical studies prepared in support of the Initial Study and MND, identify the potential environmental effects attributable to the proposed Project and specify mitigation measures where necessary to minimize or avoid the Project's significant environmental effects.

This MND includes a summary of the history of the proposed Project site, provides a summary of the relevant CEQA requirements for preparation and processing a MND, an overview of the existing environmental setting that forms the baseline for the environmental analysis, and a detailed description of the proposed Project. The Initial Study prepared in support of this MND is provided as Appendix A.

The MMRP, which summarizes the various mitigation measures that were identified to minimize or avoid the Project's significant environmental effects, is provided as Appendix B. The MMRP also indicates the required timing for the implementation of each mitigation measure, identifies the parties responsible for implementing and/or monitoring each mitigation measure, and identifies the level of significance following the incorporation of each mitigation measure.

Table 1-1 Annual Tonnage for SMP 139 and PP 1828 (1995 to 2009)

Year	Annual Tonnage
1995	1,111,318
1996	1,135,600
1997	1,417,710
1998	1,413,750
1999	1,868,123
2000	1,833,440
2001	2,190,177
2002	2,116,909
2003	2,215,934
2004	1,987,332
2005	1,714,063[1]
2006	1,440,794[1]
2007	1,167,525
2008	624,520
2009	484,817[1,2]
Average Annual Tonnage (1995 to 2009):	***1,514,801***

1. Tonnage data for 2005 and 2006 are not available from the Project Applicant; values represent a linear interpolation from available tonnage data for immediately preceding and following years (i.e., 1,987,332 tons in 2004 and 1,167,525 tons in 2007).
2. Tonnage data for 2009 is not available from the Project Applicant; the value shown for 2009 represents a linear interpolation from available tonnage data from preceding and following years (i.e., 624,520 tons in 2008 and 205,410 tons in 2011).

Provided as Appendices C through I are the various technical studies and other supporting information that were relied upon in support of the findings contained in the Initial Study, and include the following:

Appendix C Air Quality and Greenhouse Gas Evaluation Report, prepared by Associates Environmental and dated July 2013.

Appendix D1	Biological Technical Report, prepared by Glenn Lukos Associates, Inc. and dated February 4, 2013.
Appendix D2	Oak Tree Survey, prepared by Glenn Lukos Associates, Inc. and dated June 12, 2013.
Appendix E	Report of Slope Stability Evaluation, prepared by Hilltop Geotechnical, Inc., and dated September 14, 2011
Appendix F1	Preliminary Hydrology & Drainage Analysis, prepared by Joseph E. Bonadiman & Associates, Inc., and dated August 2011
Appendix F2	Project Specific Water Quality Management Plan, prepared by Joseph S.C. Bonadiman & Associates, Inc. and dated August 2011
Appendix F3	Addendum Letter to Hydrology/Drainage Analysis and Water Quality Management Plan ("Hydrology & Hydraulics/WQMP for Updated SMP00139R1), prepared by Joseph E. Bonadiman & Associates, Inc., and dated October 22, 2012.
Appendix G	Noise Impact Analysis, SMP 139 Extension/Revision, prepared by Giroux and Associates and dated December 24, 2012.
Appendix H	Surface Mining Permit 139R1 (Conditional Use Permit 03679) Traffic Impact Analysis, prepared by Urban Crossroads, Inc., and dated January 22, 2013.
Appendix I	Hydrologic Characterization of the Coldwater Basin, Corona, CA, prepared by Bulot, Inc., and dated March 8, 2012.
Appendix J	Miscellaneous Correspondence and Supporting Documentation.
Appendix K	Historic Storm Runoff Analysis, prepared by Chang Consultants, and dated June 13, 2013.

Each of the appendices listed above are available for review at the County of Riverside Planning Department, located at 4080 Lemon Street, 12th Floor, Riverside, California.

1.4.6 Mitigated Negative Declaration Processing

The Riverside County Planning Department directed and supervised the preparation of this MND, which reflects the sole independent judgment of Riverside County. Following completion of this MND, A Notice of Intent (NOI) to adopt the MND will be distributed as part of the Planning Commission hearing notice to the following entities: 1) organizations and individuals who have previously requested such notice in writing; 2) owners and occupants of contiguous property shown on the latest equalized assessment roll; 3) responsible and trustee agencies (public agencies that have a level of discretionary approval over some component of the proposed Project); 4) the State Clearinghouse; and 5) the Riverside County Clerk. The NOI will identify the location(s) where the MND, Initial Study, MMRP, and associated technical reports are available for public review. In addition, notice of the Planning Commission hearing and 30-day review period for the MND also will occur via publication in a newspaper of general circulation in the Project area. The Planning Commission hearing notice and

associated NOI also establishes a 30-day public review period during which comments on the adequacy of the MND document may be provided to the Riverside County Planning Department.

Following the 30-day public review period, the County of Riverside will review any comment letters received and will determine whether any substantive comments were provided that may warrant revisions to the MND document. If substantial revisions are necessary (as defined by CEQA Guidelines §15073.5[b]), then the MND and Initial Study would be recirculated for an additional 30-day public review period.

Following conclusion of the public review process, a public hearing will be held before the Riverside County Planning Commission. The Planning Commission will consider the proposed Project and the adequacy of this MND, at which time public comments will be heard. At the conclusion of the public hearing process, the Planning Commission will take action within their authority to outright approve, conditionally approval, or deny approval of the proposed Project.

The decision of the Planning Commission is considered final and no action by the Board of Supervisors is required unless, within ten (10) days after the notice of decision appears on the Board's agenda, the Project Applicant or an interested person files an appeal. Additionally, SMP 139R1 would be sent to the Board of Supervisors as a "Receive and File" action; the Board of Supervisors has the option of pulling the SMP 139R1 approval from the "Receive and File" docket and assuming approval authority. If an appeal is filed, or if the Board of Supervisors opts to assume approval authority, then the Board of Supervisors would consider the proposed action and the adequacy of this MND. In such cases, the Board of Supervisors would conduct a public hearing to evaluate the proposal and would take final action to outright approve, conditionally approval, or deny approval of the proposed Project.

2.0 ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

As shown on Figure 2-1, *Regional Location Map*, and Figure 2-2, *Vicinity Map*, the proposed Project site is located within the Temescal Canyon portion of unincorporated Riverside County, approximately 4.5 miles northwest of the City of Lake Elsinore and 3.25 miles south of the City of Corona. Specifically, the proposed Project site comprises approximately 215 acres of land located at 24890 Maitri Road. The site is bounded on the west by Maitri Road and on the north by Temescal Canyon Road, while an unimproved access road occurs along the southwestern Project boundary. The eastern portion of the proposed Project site abuts an existing master planned residential community (Sycamore Creek). The subject property encompasses Assessor's Parcel Numbers 290-060-043, and 290-110-012, 015, 017, 019, 024, 025, and is located in Sections 2 and 11 of Township 5 South, Range 6 West, San Bernardino Baseline and Meridian.

In addition to the Project site, off-site impact areas are evaluated as part of this MND because physical impacts to such areas are a reasonably foreseeable consequence of Project approval, although activities within the off-site impact areas would require future discretionary approvals from Riverside County. The off-site areas include a portion of Maitri Road and the east-west access road, and portions of existing mining sites located to the west (SMP 202) and south (SMP 143, SMP 150, and SMP 182), as shown on Figure 2-3, *Location of Off-Site Impact Areas*. For purposes of discussion herein, off-site areas subject to future physical disturbance as a result of the proposed Project are referred to as the "off-site impact areas."

2.2 EXISTING SITE AND AREA CHARACTERISTICS

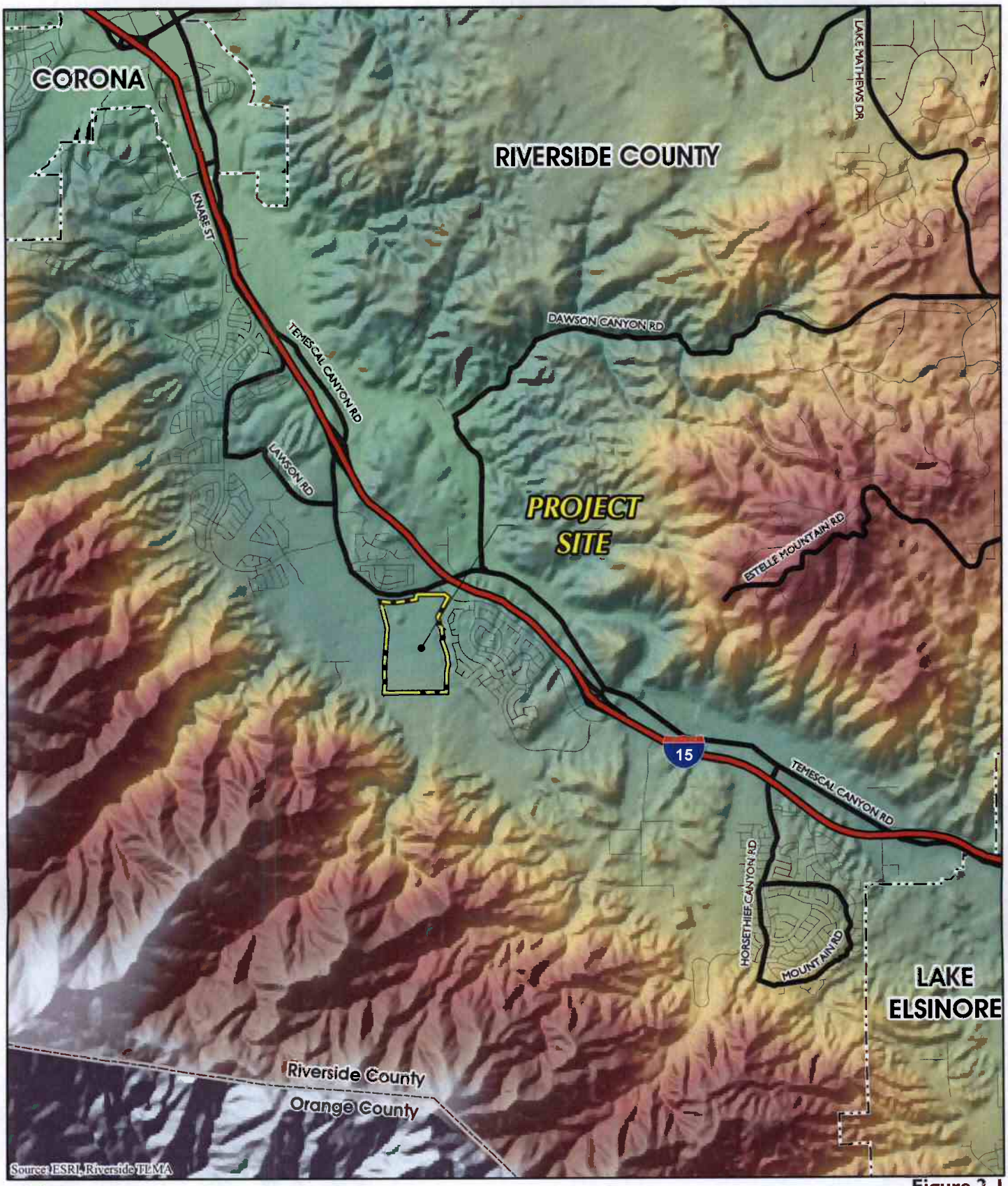
2.2.1 Site Access

Access to the Project site is via Maitri Road, south of Temescal Canyon Road. Customers and employees commuting to the site typically exit Temescal Canyon Road or Indian Truck Trail off of Interstate 15 in the unincorporated area of Riverside County between the cities of Corona and Lake Elsinore. Maitri Road was a public road at the time the environmental analysis for the proposed Project commenced in early 2010, but was converted to a private road by the Riverside County Board of Supervisors pursuant to Resolution No. 2012-103 (Appendix J). Security and public safety will be assured through the use of controlled access, with security during off-hours, near the intersection of Maitri Road and Temescal Canyon Road, although such access restrictions and security were not in place at time the environmental analysis for the proposed Project commenced, although such measures would be in place prior to Project approval.

2.2.2 Existing Site Conditions

The Temescal Canyon area contains a number of surface mining operations, most of which have been in operation since the 1970s and 1980s, and is the source of large quantities of construction grade aggregates for Riverside, Orange, San Diego and San Bernardino Counties. The alluvial fans of Mayhew Canyon and Coldwater Canyon have both been recognized by the California Geological Survey (CGS) and Riverside County as having geological resources significant to the State of California. The proposed Project site is located at the point where these two alluvial fans converge.

Figure 2-4, *Aerial Photograph*, depicts the existing conditions of the proposed Project site and off-site impact areas.



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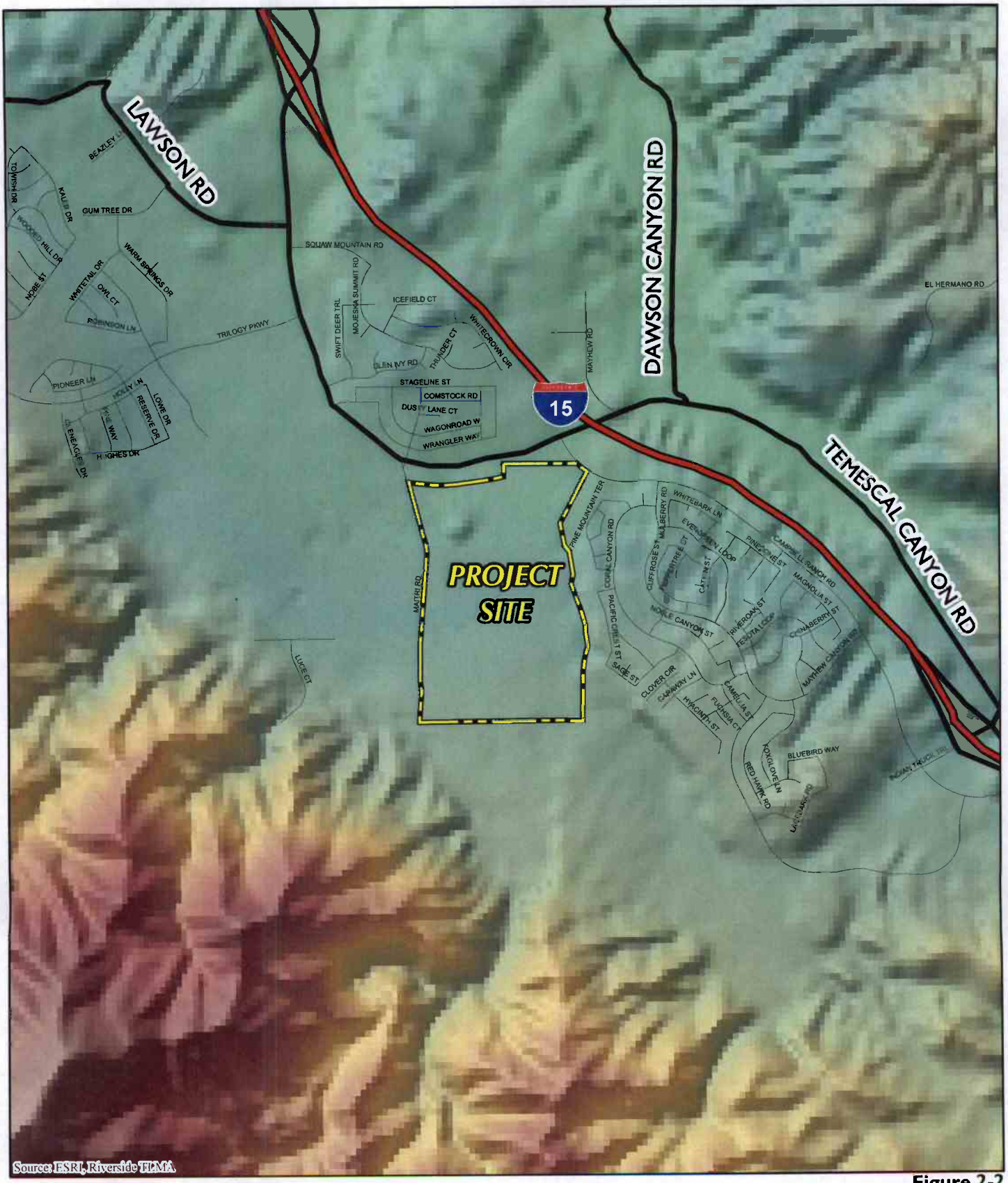
0 0.25 0.5 1 Miles

Figure 2-1

REGIONAL LOCATION MAP



Source: ESRI, Riverside, FEMA

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Figure 2-2

VICINITY MAP

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Figure 2-3

LOCATION OF OFF-SITE IMPACT AREAS

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Figure 2-4

AERIAL PHOTOGRAPH

As shown on Figure 2-4, the proposed Project site is currently used as a permitted sand and gravel mining operation. The proposed Project site is surrounded by chain-link fencing and marked with signage to restrict public encroachment into the mining areas. Within the site, a 50-foot setback is observed within which mining does not occur as required pursuant to PP 1828 and SMP 139.

The central portion of the proposed Project site contains an existing aggregate desilting basin, which allows for the settlement of solids out of water used in processing activities. Water from the desilting basin is then re-used in the mining operations . In the south-central portion of the property is the main aggregate mining pit. In the west-central portion of the proposed Project site is an existing processing plant, composed of a crushing station, several conveyors, a surge pile, a washing and sizing station, and storage areas. Throughout the proposed Project site are a variety of gravel stockpiles and washed sand stockpiles, in addition to dirt roadways that facilitate the mining operations.

As documented by the Army Corps of Engineers (ACOE) in their determination that Mayhew Creek does not comprise a water of the U.S. (Appendix J), in January/February 2005, heavy rains, combined with geological movement along the Glen Ivy Fault line, caused the bank between the Mayhew Creek and the southern and eastern SMP 139 pit walls to substantially erode and partially collapse into the SMP 139 mining pit. As a result, flows from Mayhew Creek began to immediately discharge directly into the SMP 139 gravel pit and created instability of the southern and eastern slopes of the mining pit. In order to address this emergency condition, in approximately April 2005 the former mining operator (CEMEX) was directed by the Riverside County Building & Safety Department to construct a concrete down-drain structure measuring approximately 300 feet in length along the southern pit wall of the SMP 139 site.

The down-structure was approved by the Riverside County Planning Department on October 23rd, 2006 under RCL00106S1, and also was subject to review and consultation with the ACOE, California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB). As a result of this review, Mayhew Creek was determined by the ACOE not to comprise a Water of the U.S., and was therefore not subject to regulation under Section 404 of the Clean Water Act (CWA), thereby excusing Cemex from the need to obtain a Section 404 Permit from ACOE or a Section 401 Certification from the RWQCB. As part of the review and approval process associated with RCL00106S1, the mining operator was required to prepare a Habitat Mitigation and Monitoring Program (HMMP), which required the creation of 9.7 acres of mule fat scrub habitat within the northeastern portions of the original SMP 139 site (and outside of the areas proposed to be included within SMP 139R1).

Due to the heavy rains and the geological movement along the Glen Ivy Fault Line, and the subsequent required and constructed down-drain structure, it was determined that the existing mining pit is sufficiently sized to capture and retain multiple 100-year storm events, effectively cutting Mayhew Creek off from the original flow line; thus, only minimal flows from the Mayhew Creek are discharged from the site to downstream areas. Furthermore, although flows from Mayhew Creek are mostly detained on-site, these flows are not used as part of any existing or proposed mining operations. Rather, the flows ultimately are absorbed into the ground and contribute to the existing groundwater table.

The only portions of the proposed Project site that remain relatively undisturbed under existing conditions include approximately six (6.0) acres along the eastern boundary of the property that consist of sage scrub habitat occurring on the upper banks of a riverine feature that collects in the northeastern corner of the proposed Project site. The northeastern corner of the proposed Project site was at one time actively mined, but now contains riparian vegetation. Disturbed habitat also occurs along the southwestern, southern, and southeastern perimeter of the proposed Project site, along the upper portions of the existing slopes.

Figure 2-4 also depicts the existing conditions for the off-site impact areas. As shown, a portion of the off-site impact areas encompass Maitri Road, an improved roadway located along the western boundary of the Project site, and portions of an east-west access roadway located along the southern boundary of the proposed Project site.

Off-site impact areas located west of Maitri Road encompass a portion of an existing mining site (SMP 202) and include existing slopes, unpaved roads, a desilting pond, equipment storage areas, and several existing stockpiles. Sparse areas of disturbed natural vegetation occur along the southern and southeastern slopes of the SMP 202 site (i.e, disturbed Riversidean sage scrub and coast live oak). To the south of the SMP 202 site is an existing administrative building and paved parking lot with existing ornamental vegetation (which is not anticipated to be impacted by future mining activities) as well as natural habitat (i.e., chaparral and Riversidean sage scrub). At the southern edge of the off-site impact area is an existing access roadway serving a water tank.

Impact areas to the south of the proposed Project site (and southerly of the east-west access road) encompass a separate existing mining operation (SMP 143, SMP 150, and SMP 182). These areas are fully disturbed and include numerous unpaved roadways, overhead utility lines, a paved parking area, a trailer, storage sheds, several conveyer belts, a desilting pond, weigh station, crushing station, surge pile, washing and sizing station, and several existing stockpiles. Disturbed habitat occurs west of the desilting pond (i.e., disturbed Riversidean sage scrub), and several existing trees and ruderal vegetation abut the southern edge of the east-west access road.

2.2.3 General Plan and Zoning

The proposed Project site, which consists of approximately 215 acres permitted for mining, is designated by the Riverside County General Plan and Temescal Canyon Area Plan as "Open Space – Mineral Resources (OS – MIN)." The proposed Project site is zoned for "Mineral Resources and Related Manufacturing (M-R-A)," which permits mining subject to a mining permit under Riverside County Ordinance 555. The proposed Project site is not located within any General Plan Policy Areas.

General Plan designations surrounding the proposed Project site include the following: OS-MIN to the west; OS-MIN to the south; "Open Space – Conservation (OS-C)," "Open Space Recreation (OS-R)," and "Medium Density Residential (MDR)" to the east; and "Light Industrial (LI)," "Business Park (BP)," and "Medium High Density Residential (MHDR)" to the north. The off-site impact areas all are located within the OS-MIN designation.

Zoning designations surrounding the proposed Project site include the following: M-R-A to the west; M-R-A and "Natural Assets (N-A)" to the south; "Specific Plan Zone (SP Zone)" to the east; and SP Zone, "Manufacturing-Service Commercial (M-SC)," "Commercial Office (C-O)," and "Mobile Home Subdivisions & Mobile Home Parks (R-T)" to the north. The off-site impact areas all are zoned M-R-A.

2.2.4 Surrounding Land Uses and Development

Figure 2-5, *Surrounding Land Uses and Development*, depicts the proposed Project site and the existing land uses on and immediately surrounding the proposed Project site including the off-site impact areas. As shown, existing surrounding land uses include several mines located to the west and south. The

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Figure 2-5

SURROUNDING LAND USES AND DEVELOPMENT

existing mines to the south consist of Werner Corporation's Mayhew Mines, which operate under permits SMP 143, SMP 150, and SMP 182. To the west is Chandler Aggregates, which operates pursuant to SMP 202. These mines include three (3) Ready-Mix Concrete Batch Plants and an Asphalt Plant. Maitri Road, an improved two-lane roadway, abuts the western boundary of the proposed Project site. At the time environmental review for the proposed Project commenced (early 2010), Maitri Road was a public roadway; however, on June 26, 2012, the Riverside County Board of Supervisors approved a vacation of Maitri Road as part of Resolution No. 2012-103 (Appendix J); as such, Maitri Road is now a private roadway facility. Open space associated with the Santa Ana Mountains and the Cleveland National Forest occurs approximately 0.25 mile to the southwest of the proposed Project site.

Immediately east of the proposed Project site is an existing residential community, which is part of the approved Sycamore Creek Specific Plan (Specific Plan No. 256). The Sycamore Creek community consists of single-family residential homes, commercial land uses, recreational center, fire station, elementary school, open space, and parks. To the north of the proposed Project site are several undeveloped parcels and an existing electrical substation. Further to the north, and beyond Temescal Canyon Road, is an existing residential community (Butterfield Estates) consisting of medium high density residential land uses and passive recreation areas.

The closest residence within Sycamore Creek is more than 250 feet from the proposed Project site, while the closest residence within Butterfield Estates occurs at a distance in excess of 500 feet. In addition, an existing residence is located approximately 3,500 feet southeast of the proposed Project site (or approximately 2,800 feet southeast of the nearest portion of the off-site impact area).

2.3 EXISTING OPERATIONAL CHARACTERISTICS

Under existing conditions, the proposed Project site and off-site impact areas consist of surface mining operations producing construction-grade aggregates primarily used in Riverside, with lesser amounts that are exported to Orange, San Diego, and San Bernardino Counties. The primary minerals extracted from the proposed Project site are construction grade sand and gravel.

Existing operations at the proposed Project site involve the use of front-end loaders, dozers, haul trucks, and a water truck within the mining pit to bring the raw material to the processing plants for crushing, washing, and sizing. There is no topsoil or overburden on the proposed Project site, because the site has been mined for 35 +/- years and these materials have been removed by the on-going mining activities. Table 2-1, *Operational Equipment Summary for Existing Conditions*, summarizes the equipment utilized on-site on a daily basis under existing conditions, based on information provided by the Project Applicant for the baseline operating period (between 1995 and 2009) (refer to Appendix J). As shown, mining activities during this period required the equivalent of approximately 4,408 horsepower per day.

Mining in the pit begins with front-end loaders and haul trucks delivering the material to the primary crushing station. At the crushing station, initial screening separates material using a two-inch opening, which creates a sand surge and a rock surge pile for further processing. No blasting is required or allowed for mining operations under existing conditions.

The sand is then washed and sized according to the particular specifications of different products (Washed Concrete Sand, Washed Plaster Sand, etc.) and distributed into stockpiles via stacking conveyors, where it dewaters and awaits final shipment. The rock surge pile is crushed, washed, and sized according to specifications, and stockpiled using a combination of stacking conveyors. Sands are produced for use in concrete, asphalt, plaster, and block production.

Table 2-1 Operational Equipment Summary for Existing Conditions

Hours/Day	Description	Quantity	Horse Power	Total Horse Power
12	775D Haul Truck	2	682	1364
12	769C Haul Truck	1	474	474
16	769C Water Truck	1	474	474
12	990F Wheel Loader	1	675	675
12	988F II Wheel Loader	1	430	430
20	980G Wheel Loader	1	300	300
10	D9N Dozer	1	370	370
4	345B Excavator	1	321	321
	Total Daily Operational Horse Power (Existing Conditions):			4,408

Operations occur seven (7) days per week/24 hours per day. Activities are required to comply with Riverside County Noise and Lighting Standards (Riverside County Ordinances 847 and 915, respectively), as well as Riverside County Ordinances 555 (Surface Mining and Reclamation Act) and 348 (Land Use Ordinance). The processing plant at the proposed Project site has the capacity to produce approximately 500 tons per hour of sand and gravel. An operational permit with the South Coast Air Quality Management District (SCAQMD) (SCAQMD Permit No. R-F36556) has established a monthly production limit of 252,000 tons per month, which is considerably more than is being produced under existing conditions.

Production limits are not expressly stated in the operating permits for either PP 1828 or SMP 139. However, a review of the Staff Reports and supporting documentation for the entitlements show annual production limits for PP 1828 of 1,020,000 tons per year and 4,000,000 tons per year for SMP 139 (or a combined annual production limit of 5,020,000 tons per year). Permitted depths for the mining operations range from 300 feet in the southeast corner (within SMP 139) to a maximum depth of 575 feet in the center of the PP 1828 area.

The proposed Project site is graded to capture all surface flows and retain them on-site. Pit walls are sloped and hydro-seeded as excavations reach the outer boundary of the mining area, to prevent rilling and erosion from impacting off-site property.

Access gates to the proposed Project site are locked when the mine is not in operation or open for sales to prevent unauthorized access.

2.4 EXISTING ENVIRONMENTAL CHARACTERISTICS

2.4.1 Geology

The Temescal Valley is filled by sedimentary materials that range in age from Late Tertiary to Holocene. Sedimentary sequences of the Temescal Valley are underlain by Mesozoic-age, crystalline basement rocks that are visible in hills on both sides of the valley.

The alluvial fan material being mined in the Temescal Valley was sourced from canyons to the southwest of the proposed Project site, within the eastern side of the Santa Ana Mountains. Deposition of sediments within the alluvial fan took place during the Late Pleistocene through the Holocene ages and continues today.

Two geologic formations are primary sources for alluvial fan material found at the proposed Project site. The first is the Bedford Canyon formation, which is a slightly metamorphosed assemblage of interlayered argillite, slate, phyllite, graywacke, impure quartzite, and small amounts of limestone. Most

of these materials are dark colored, very fine-grained, and range from slightly to highly weathered. Weathering, erosion, and deposition of Bedford Canyon materials typically results in a very fine-grained matrix of clayey or silty sand supporting gravel to cobble sized, dark-colored, fine-grained clasts. There is relatively little quartz or alkali feldspar associated with the Bedford Canyon formation.

The second source formation for materials found on the proposed Project site is a part of the Creteceous-age, Peninsular Ranges Batholith. This material consists of a heterogeneous mixture of granitic rocks including monzogranite, granodiorite, tonalite, and gabbro. The monzogranite and granodiorite are sources for relatively large quantities of quartz and unweathered, alkali feldspar. The resulting deposits of this material on the proposed Project site consist largely of clean, quartz and feldspar sands with hard, fresh to slightly weathered gravels and cobbles, with virtually no clay and very little silt.

A few active or potentially active faults are located on or close to the proposed Project site and off-site impact areas. The Glen Ivy North fault crosses the north edge of the existing SMP 139 pit, and continues northwest, passing to the north of the SMP 202 and 133 pits. This fault does not traverse the off-site impact areas. The Glen Ivy South fault is located along the south edge of SMP 143, 150, and 182 and continues to the northwest, passing within 1,000 feet of the proposed Project site and off-site impact areas (the Glen Ivy South fault does not occur within the off-site impact areas). A third, unnamed fault, only found on the Riverside County TLMA GIS fault map, is located within 300 feet of the southwest corner of the SMP 139 pit. Another fault, which is unnamed on available maps but may be the Indian Canyon fault, trends toward the proposed Project site, but is truncated by the Glen Ivy South fault one-half mile to the west of the proposed Project site.

2.4.2 Hydrology

The proposed Project site is located within a watershed comprising approximately 3,045 acres total. Of this, 2,990 acres were analyzed by the Project's hydrologist (refer to Appendix F1) to determine runoff volumes. In summary, the existing excavated pits collect and retain runoff from approximately 2,826 acres of the watershed (including the entire runoff from the Mayhew Creek watershed). The remaining 164-acre drainage area, which occurs in a northerly-trending watercourse along the eastern edge of the proposed Project site and does not discharge to the main pit, discharges through an existing 30-foot culvert running under Temescal Canyon Road. A portion of this runoff is retained within the existing excavation pit located at the northeast portion of the proposed Project site; the remaining flows are discharged through the existing culvert.

Prior to the 1970s, off-site flows from the Mayhew Creek that entered the site from upstream areas were conveyed through the Project site in undefined drainage channels. Based on an analysis conducted by Chang Consultants (refer to Technical Appendix K), virtually all of these flows infiltrated into the groundwater table and did not contribute substantial flows to downstream areas (i.e., Temescal Creek). Specifically, during a majority of storm events, roughly 98% of the time based upon probabilities of storm events (including the 2- and 25-year storm events), all runoff traversing the site infiltrated into the groundwater table. Only during 50- and 100-year storm events (with a 1 to 2 percent chance of occurring during any given year) did runoff from the Project site and upstream areas reach downstream tributaries (including Temescal Creek).

With the commencement of mining activities the site in the 1970s, flows from Mayhew Creek being conveyed through the Project site were diverted via a man-made, soft-bottom drainage course around the SMP 139 mining operations. With the diversion of these flows into a man-made channel, runoff discharged from the site (including flows from Mayhew Creek) to downstream tributaries increased in both volume and velocity as compared to historic (and natural) conditions.

In January/February 2005, heavy rains, combined with geological movement along the Glen Ivy Fault line, caused the bank between the Mayhew Creek and the SMP 139 pit wall to substantially erode and partially collapse into the SMP 139 mining pit. As a result, flows from Mayhew Creek began to discharge immediately into the SMP 139 gravel pit and created instability and safety issues with respect to the southern slopes of the mining pit. In order to address this emergency condition, the mining operator at the time (CEMEX) constructed a concrete down-drain structure measuring approximately 300 feet in length along the southern pit wall of the SMP 139 site. The purpose of this down-drain structure was to stabilize the southern pit wall against water erosion hazards. With completion of the down-drain structure, flows from the Mayhew Creek were fully detained within the SMP 139 pit and no longer were conveyed downstream to the Temescal Wash (during 50- or 100-year storm events).

Although the construction of the down-drain structure eliminated surface flows that otherwise might have reached Temescal Creek, the change in the site's drainage patterns that occurred from installation of the down-drain structure more closely resemble the site's natural conditions prior to the 1970s, as compared to the conditions that existed following the diversion of flows into the man-made drainage channel described above. Because a majority of flows traversing the site infiltrated into the groundwater table in pre-1970 conditions, the current condition of the site, wherein all flows are diverted to a detention basin via the down-drain structure and allowed to infiltrate into the groundwater table, more closely resembles the historic drainage pattern of the site as compared to conditions that existed between the 1970s and 2005.

2.4.3 Groundwater

Based on a site-specific groundwater analysis conducted by BULOT, Inc., groundwater beneath the proposed Project site is conservatively estimated to occur at an elevation of approximately 915 feet above mean sea level (amsl), although groundwater elevations averaging as high as 967 feet may result from two wet years in a row. Groundwater within the basin moves from the southwest towards the Glen Ivy Fault.

2.4.4 Soils

The *Soil Survey for the Western Riverside Area* (United States Department of Agriculture, 1971) indicates that the Mayhew Canyon alluvial fan is composed primarily of Cortina gravelly loamy sand. In a typical 60 inch profile, the surface layer is grayish-grown gravelly loamy sand about 10 inches thick. Below this is a grayish-brown gravelly sandy loam and very gravelly coarse sand. Such soils are considered to be good sources of sand and gravel. This sandy deposit is known to extend much more deeply than the 60 inches included in the soil survey (Chambers Consultants, June 1981). Yellowish-brown coarse gravelly sand, in addition to the preceding, was also encountered in the upper 60" of the deposit during on-site drilling.

Drilling for the slope stability analysis conducted in March 2011 by Hilltop Geotechnical confirmed the above findings, with the additional notation that the deposit of sand and gravel extends at least 300' below the surface.

2.4.5 Vegetation

The proposed Project site has been used for surface mining, sales and shipping of aggregate materials, and production of ready-mix concrete since the early 1970's. As such, the entire site is disturbed, and any vegetation that exists on the property is in the form of ornamental landscaping, visual buffer berms, or areas of partial reclamation/revegetation.

Based on a biological survey conducted on the proposed Project site in by Glenn Lukos Associates (refer to Appendix D1), nine (9) distinct vegetation/land use types are mapped for the Project site and off-site impact areas. The vegetation/land use types include disturbed, disturbed alluvial scrub, chaparral/ disturbed chaparral, coast live oak woodland, Riversidean sage scrub/ disturbed Riversidean sage scrub, residential/urban/exotic, southern willow scrub, disturbed mulefat scrub, and aggregate desilting basin. A summary of vegetation communities that occur on the proposed Project site and within the off-site impact areas is provided below. Figure 2-6, *Existing Vegetation Communities*, depicts the location and extent of vegetation communities located on the proposed Project site and within the off-site impact areas.

The proposed Project site and off-site impact areas are characterized predominantly by areas of substantial disturbance as a result of past and current surface mining operations. Areas not actively mined are dominated by non-native ruderal species including castor bean (*Ricinus communis*), Russian thistle (*Salsola tragus*), summer mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), tamarisk (*Tamarix* sp.), and lambs quarters (*Chenopodium album*). Native ruderal species that occur in these areas of high disturbance include mule fat (*Baccharis salicifolia*) and telegraph weed (*Heterotheca grandiflora*). These areas of substantial disturbance are classified as "Disturbed" on Figure 2-6.

As a result of the mining operation, large stockpiles of mine tailings have created variations in topography resulting in hilly terrain composed of sandy and cobbly material. The hills and slopes have a similar vegetation composition as the flatter areas across the proposed Project site with the addition of some native scrub species including coyote bush (*Baccharis pilularis*), California brittle bush (*Encelia farinosa*), California buckwheat (*Eriogonum fasciculatum*), deerweed (*Acmispon glaber*), California everlasting (*Gnaphalium californicum*), wreath plant (*Stephanomeria virgata*), and purple nightshade (*Solanum xanti*). The slopes also contain a variety of non-native grasses dominated by brome species including ripgut brome (*Bromus diandrus*) and red brome (*Bromus madritensis* ssp. rubens). Areas containing these native scrub species typically occur on the perimeter of the proposed Project site in locations that have not been subject to recent mining activities and exhibit topographic variability that mimics a natural condition. These areas are classified as Disturbed Riversidean Sage Scrub on Figure 2-6.

Within the actively mined area in the center of the proposed Project site and within portions of the adjacent off-site mining sites are man-made impoundments of water used in the mining operations, which have resulted in ponded features vegetated predominantly with southern cattails (*Typha domingensis*), arroyo willow, mule fat, and tamarisk. These areas are classified as Aggregate Desilting Basin (ADB) on Figure 2-6.

Along the eastern boundary of the proposed Project site is a riverine feature that conveys flows collected east of the proposed Project site and directs them to a riparian basin in the northeast corner of the proposed Project site. The basin area outlets off-site to the north under Temescal Canyon Road via a drainage that is tributary to Temescal Wash. The southern end of the riverine feature is largely unvegetated within the ordinary high water mark (OHWM), with floodplain terraces vegetated with scalebroom (*Lepidospartum squamatum*), tamarisk, tree tobacco, brittle bush and California buckwheat. Moving north, the OHWM degrades as waters collect in an area that outlet to a series of culverts. Where the water collects, a patch of riparian vegetation dominated by mule fat, tamarisk, and arroyo willow (*Salix lasiolepis*) saplings are emerging. The banks above the OHWM up to the proposed Project site's eastern boundary are characterized by steep grades vegetated with RSS dominated by California sagebrush, California buckwheat and scale broom. The northern extent of the riverine feature terminates in a riparian basin prior to exiting the proposed Project site to the north beneath Temescal

Source: Glenn Lukos Associates

T&B PLANNING, INC.

NOT TO SCALE

Figure 2-6

EXISTING VEGETATION COMMUNITIES

Canyon Road. The basin area is dominated by anoyo willow, black willow (*Salix gooddingii*), mule fat, tamarisk, summer mustard, curly dock (*Rumex crispus*), and scale broom. Surrounding the basin are manufactured slopes vegetated with disturbed RSS.

The western extent of the proposed Project site and off-site impact areas include the current alignment of Maitri Road, which is lined with ornamental/exotic plant species as well as highly disturbed RSS typical of remnant mine tailings stockpiles. These areas also include an active aggregate desilting pond as well as a remnant aggregate desilting pond that has been converted to a tailings stockpile. The southwest comer of the off-site impact area transitions from an area of active disturbance to one of minimal to no disturbance in the vicinity of the existing off-site administrative office building. Areas south and west of the administrative office facility and parking areas are dominated by coast live oak (*Quercus agrifolia*) woodland, Riversidean sage scrub (RSS), chaparral and RSS/chaparral ecotone.

2.4.6 Wildlife

Wildlife surveys conducted by Glenn Lukos Associates (refer to Appendix D1) did not identify any special-status animal species within the proposed Project site or off-site impact areas. However, certain special-status animals have the potential to occur including: Bell's sage sparrow, burrowing owl, coast horned lizard, coast patch-nosed snake, orange-throated whiptail, ferruginous hawk (foraging), least Bell's vireo, loggerhead shrike (foraging), northern harrier (foraging), San Diego black-tailed jackrabbit, southern rufous-crowned sparrow, tricolored blackbird, white-faced ibis, white-tailed kite (foraging), yellow-breasted chat, and yellow warbler.

3.0 PROJECT DESCRIPTION

The proposed Project consists of an application for a Surface Mining Permit Revision (SMP 139R1). A detailed description of the proposed Project is provided in the following sections.

3.1 PROPOSED DISCRETIONARY APPROVALS

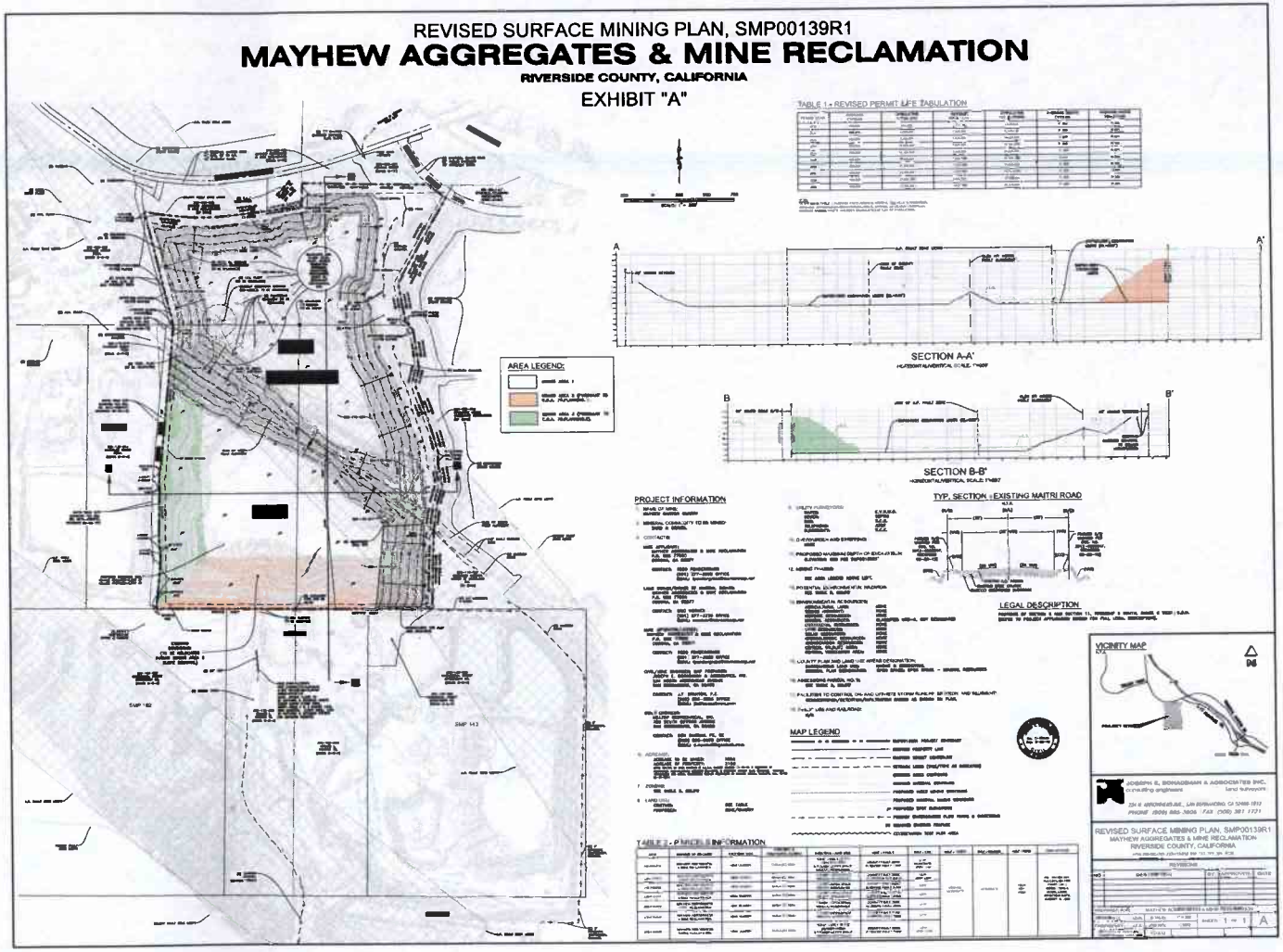
3.1.1 SMP 139R1

SMP 139R1 consists of a proposal to consolidate the activities allowed by three (3) existing permits (PP 1828, RCL 106, and SMP 139) under a single, comprehensive entitlement for the property. Figure 3-1, *Revised Surface Mining Plan for SMP 139R1*, depicts the proposed, revised surface mining plan for SMP 139R1. A full-sized exhibit is available at the County of Riverside Planning Department, located at 4080 Lemon Street, 12th Floor, Riverside CA.

Areas permitted for mining on the approximately 215-acre Project site would consist of approximately 186 acres, concentrated in the western portions of the site. All uses currently permitted under PP 1828, SMP 139, and RCL 106, including the existing, on-site concrete batch-plant, would be combined under SMP 139R1. Approval of SMP 139R1 would extend the life of the existing entitlements by approximately 50 years (from January 2018 to December 31, 2068), and would reduce the total annual tonnage allowed at the mine to 2,000,000 tons per year (reflecting a reduction of 3,020,000 million tons per year as compared to the existing entitlements). It should be noted that the 2,000,000 tons per year limitation proposed by the Project would include materials from both the aggregate mining operations as well as from the Inert Debris Engineered Fill Operation ("IDEFO"), which is described below.

Additionally, SMP 139R1 proposes to expand the reclamation area to include on-site and adjacent off-site areas forming the slopes and setbacks that comprise the boundaries between the on-site mining pits and off-site existing mining pits located on adjacent properties (which conduct extraction operations under separate approved permits [SMP 143, SMP 150, SMP 182, and SMP 202]). Figure 3-2, *SMP 139R1 Revised Reclamation Plan for Existing Mining Pits*, depicts the proposed revised reclamation plan for the majority of the site, with exception of the slopes and setback areas, while Figure 3-3, *SMP 139R1 Revised Reclamation Plan for Slopes and Setbacks*, depicts the revised reclamation plan for the slopes and setback areas. Full-sized exhibits are available at the County of Riverside Planning Department, located at 4080 Lemon Street, 12th Floor, Riverside CA.

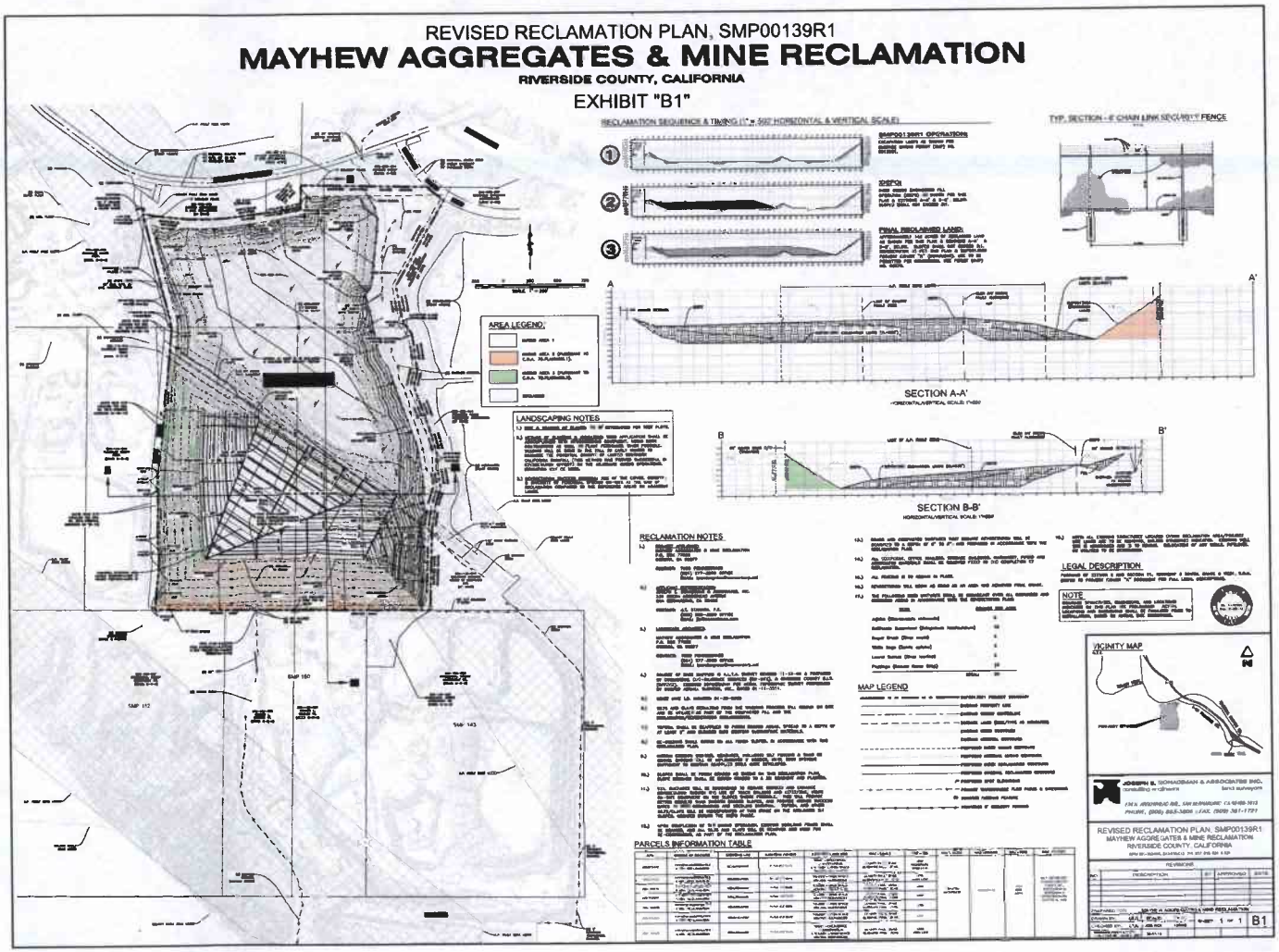
Expanding the reclamation area ultimately would result in the creation of a single pit encompassing the proposed Project site and adjacent, off-site mines instead of three separate pits as occurs under existing conditions. Conditions of approval applied to SMP 139R1 by Riverside County would prohibit mining within the on- and off-site slopes and setbacks until the existing permits for these adjacent mining sites are revised and approved to account for the geographic expansion in mining activities. Specifically, mining along the western Project boundary can occur only if SMP 202 is modified to allow for mining of the off-site slope and setback area, which can only occur after the processing of a discretionary application to modify SMP 202 and appropriate compliance with CEQA. Similarly, mining along the southern boundary can occur once SMPs 143, 150, and/or 182 are modified to allow for mining of the off-site slope and setback area, which also would require discretionary applications and appropriate compliance with CEQA. The additional aggregate reserves made accessible in the on- and off-site areas would total approximately 46,000,000 tons.



Source: Bonaduman & Associates

Figure 3-1

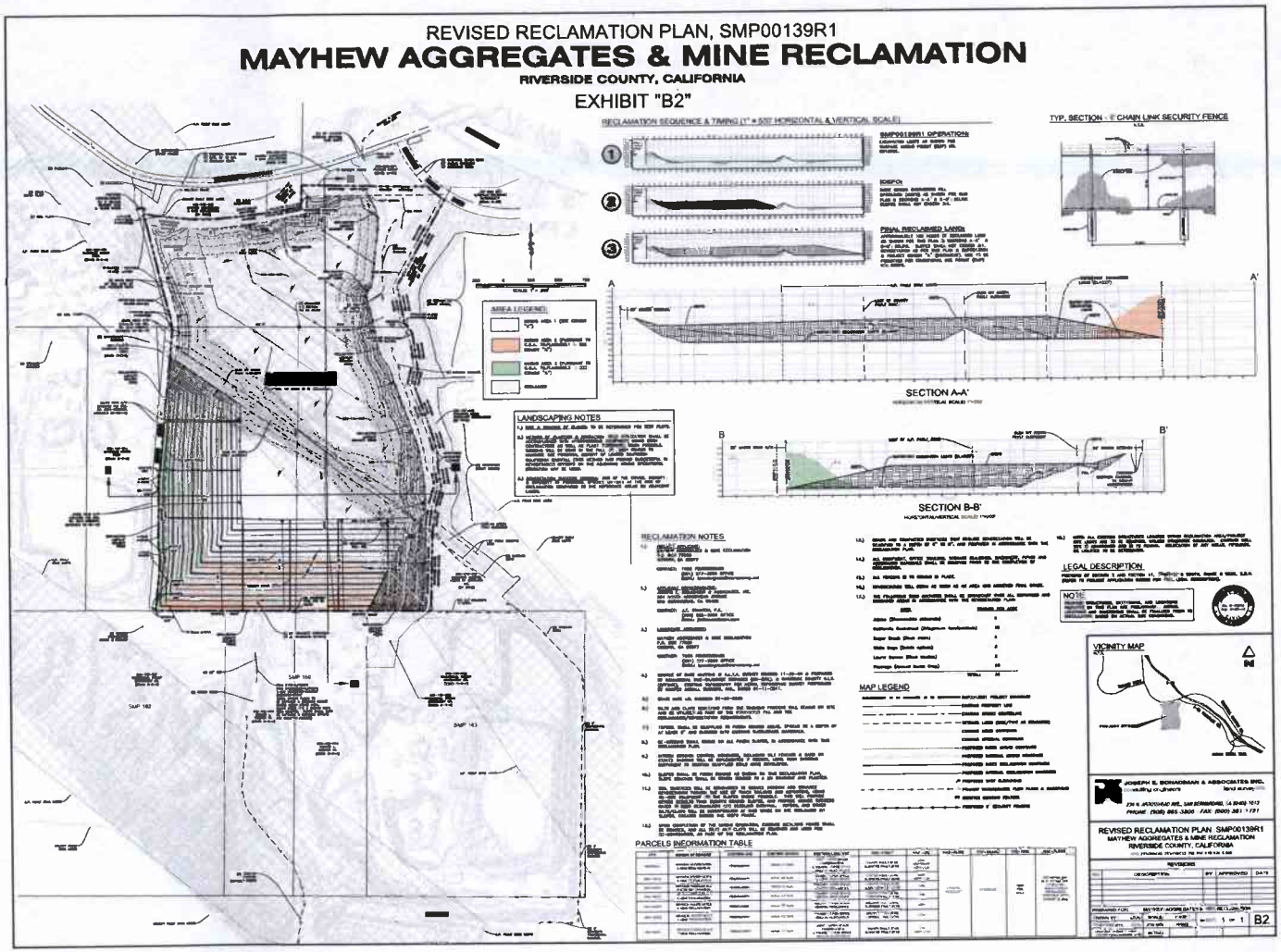
REVISED SURFACE MINING PLAN FOR SMP 139R1



Source: Bonadman & Associates

Figure 3-2

SMP 139R1 REVISED RECLAMATION PLAN FOR EXISTING MINING PITS



Source: Bonaventure & Associates

Figure 3-3

SMP 139R1 REVISED RECLAMATION PLAN FOR SLOPES AND SETBACKS

Additionally, mining of the slopes and setback areas along the site's western boundary would require relocation of Maitri Road. In order to ensure continued access to surrounding mining sites via Maitri Road (i.e., access to SMPs 143, 150, and 182), conditions of approval would be imposed on the proposed Project by Riverside County requiring a reciprocal access agreement and precluding the Project from grading or mining activities within Maitri Road until such a time that alternative access to these surrounding mining sites is provided, or until reclamation for these surrounding mining sites is completed and all mining activities have ceased.

As a necessary consequence of future mining activities, the existing down-drain structure located along the southern slope of the SMP 139 pit would need to be relocated to the south within SMP 150. The relocation of this structure is necessary in order to facilitate mining activities within the slope and setback that occurs between SMP 139 and adjacent SMP 150. However, at this time specific plans for the relocation of this down-drain structure are not available, and would be determined in association with future discretionary approvals required for SMP 150. As noted above, mining of the on-site portions of the slopes and setback areas (and thus, relocation of the down-drain structure) cannot occur until SMP 150 is revised to allow for mining of the off-site portions of the slopes and setback areas and to include the relocated down-drain structure. Accordingly, since no plans are currently available for the relocated down-drain structure, and since mining activities along the southern slopes of the Project site cannot commence until SMP 150 is revised (and plans for the relocated down-drain structure are articulated), impacts associated with this down-drain structure cannot be evaluated at this time and are considered speculative in nature (CEQA Guidelines § 15145),

To achieve final reclamation of the property that would be disturbed by SMP 139R1, the proposed Project proposes to operate an Inert Debris Engineered Fill Operation ("IDEFO"). Generally, the IDEFO would allow the mining operator to import inert construction debris to the property and then process those materials on-site as part of the reclamation plan for mining operations associated with SMP 139R1. The IDEFO would be an instrumental part of reclamation efforts to generate fill for the excavated areas of the proposed Project site, with placement of these materials initially commencing along the eastern property line. Reclamation in this area involves flattening existing slopes, then filling most of the excavated areas to create usable flat parcels for future development. The IDEFO would complement existing reclamation activities on the proposed Project site, which currently includes the use of silts and clays excavated from on-site and adjacent mining operations as fill material.

It is important to note that there would be no importation of domestic garbage, chemicals, oil, or other waste into the proposed Project site as part of the proposed Project. Waste in the form of domestic garbage generated by the mining employees and the on-site office (i.e. small amounts of paper, food scraps, containers, etc.) would be disposed of by a licensed municipal waste hauler on a weekly basis, as occurs under existing conditions. SMP 139R1 also identifies the proposed timetables and estimated completion target dates for the Project. Reclamation is proposed to be completed by December 31, 2068 to coincide with the cessation of mining activity. Reclamation of slopes and the pit areas may progress at differing rates, depending on market demand for the IDEFO operation. Although reclamation will prepare the property for future development, there are currently no plans for developing the proposed Project site upon completion of the reclamation activities. Any future development would be highly speculative to assume at this time and as such, future development is not speculated upon in this MND (CEQA Guidelines § 15145).

For purposes of fully analyzing the environmental effects of the proposed Project, it is assumed that approval of SMP 139R1 would result in the excavation and removal of aggregate materials within both the on- and off-site slopes and setback areas. This assumption is necessary because the engineering requirements associated with the excavation of the on-site portions of these slopes and setback areas

would result in physical disturbance to off-site areas. Therefore, even though the on-site slopes and setback areas could not be mined until such a time that the permits for the adjacent mines are revised to allow the mining of off-site portions of the slopes and setbacks, these off-site areas are included as part of the proposed Project evaluated in this MND. Figure 3-4, *Proposed and Future Mining Limits*, depicts the areas proposed for impact on-site, as well as off-site areas subject to impact pursuant to future discretionary approvals associated with the adjacent off-site mines from Riverside County. It should be noted that, although depicted on Figure 3-4, no mining activities are currently planned or anticipated within the existing office complex and associated parking areas located southwesterly of the proposed Project site.

As previously noted, for purposes of discussion within this MND, "proposed Project site" or "on-site" areas refer to the existing limits of the SMP 139 site (including on-site portions of the setbacks), while "off-site impact areas" or "off-site" areas refer to areas located outside of the SMP 139 site (i.e., areas that would be impacted within SMPs 143, 150, 182, and 202 (refer to Figure 1-1 and Figure 3-4). References to "proposed Project" refer to mining activities that would be permitted by, or that would be a reasonable consequence of, proposed SMP 139R1.

3.2 SCOPE OF ENVIRONMENTAL ANALYSIS

3.2.1 Proposed Physical Disturbance

As indicated above, the Project involves continued physical disturbance in on-site areas currently permitted for mining, and an expansion of disturbance areas in slopes and setbacks located on- and off-site between proposed Project site's permitted mining pits and adjacent, existing mining pits operating under permits SMP 143, SMP 150, SMP 182, and SMP 202. Because the proposed Project addresses the expansion of disturbance activities into off-site adjacent properties, the scope of analysis for physical impacts encompasses areas currently permitted for mining on-site (which have been subject to past disturbances/grading), additional areas proposed for mining/disturbance on-site, as well as off-site areas within the slopes and setbacks of adjacent properties permitted for mining under SMP 143, SMP 150, SMP 182, and SMP 202. Figure 3-4 depicts areas on-site that would be permitted for mining under the proposed Project, as well as off-site areas that would require future permit revisions. As shown on Figure 3-4, portions of the off-site areas already are permitted for mining activities pursuant to existing permits (SMPs 143, 150, 182, and/or 202).

3.2.2 Proposed Operational Characteristics

Mining operations that would occur under the proposed Project would continue in generally the same manner as it is presently entitled under approved SMP 139, PP 1828, and RCL 106. Mining operations and associated activities would continue to be conducted seven (7) days per week, 24 hours per day. Operations would remain in strict compliance with Riverside County Noise and Lighting Standards (Riverside County Ordinances 847 and 915, respectively), as well as Riverside County Ordinances 555 (Surface Mining and Reclamation Act) and 348 (Land Use Ordinance).

A. Project-Related Annual Tonnage Estimates

Although proposed SMP 139R1 would reduce the permitted maximum total annual tonnage material to be removed and/or deposited at the proposed Project site from 5,020,000 tons per year to 2,000,000 tons per year, historical data recorded by the mine operator indicates that the mine exported an

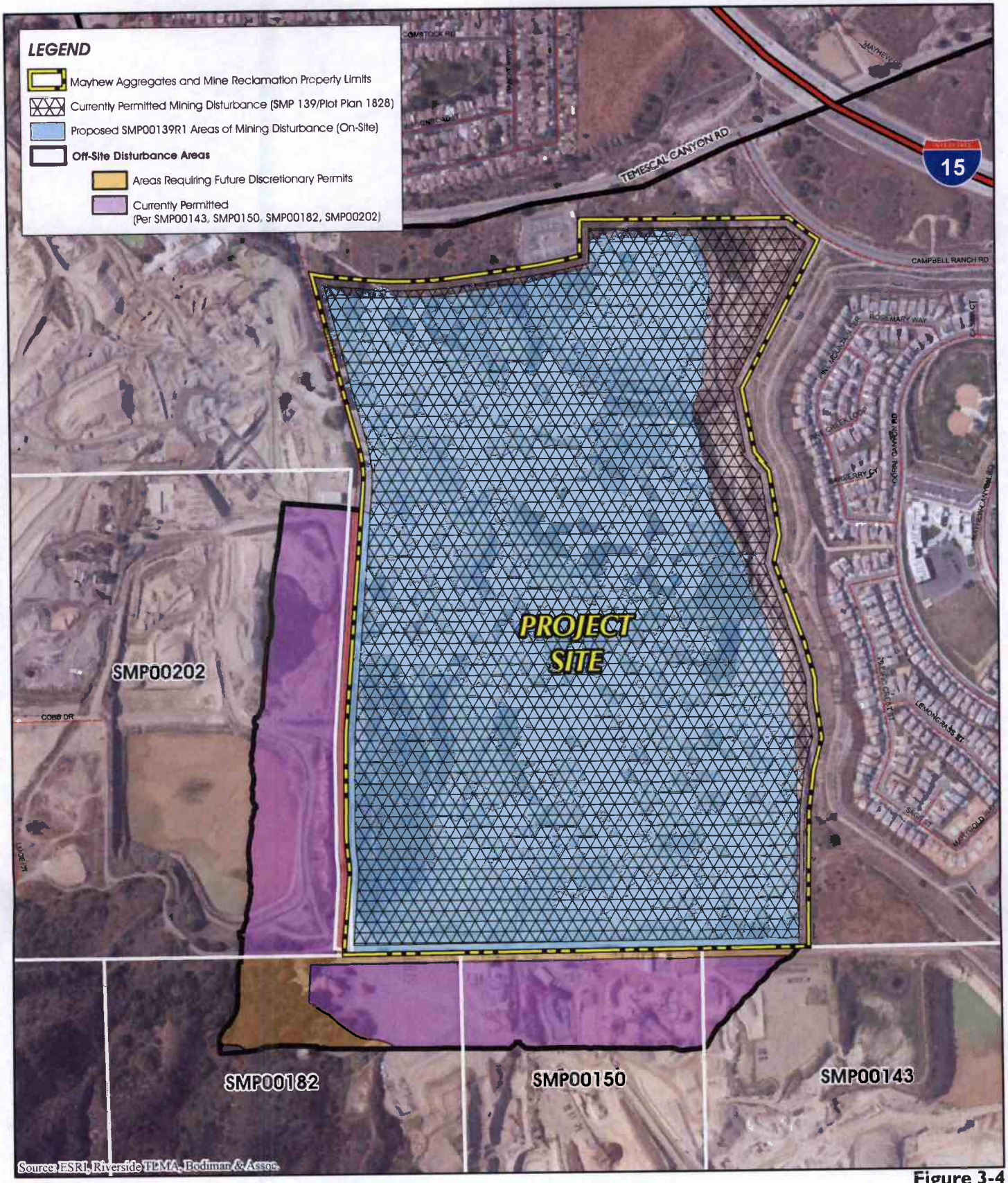


Figure 3-4

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0 175 350 700 Feet

PROPOSED AND FUTURE MINING LIMITS

average of approximately 1,514,801 tons per year between 1995 and 2009. Therefore, and pursuant to CEQA requirements for establishing a baseline condition (refer to Subsection 1.4.4, above), the proposed Project would result in a net increase of 485,199 tons per year over the existing baseline (1,514,801 tons per year), or 24.26% of the total proposed tonnage of 2.0 million tons. The total tonnage allowed under proposed SMP 139R1 (i.e., 2.0 million tons per year) is inclusive of both aggregate mining activities and IDEFO-related activities (i.e.: a combined total volume). The daily tonnage estimates described in the following section reflect a highly conservative estimate of daily operations and are used for the purposes of evaluating worst-case daily operations at the proposed Project site; as such, they are not directly related to the proposed annual tonnage limits. The daily tonnage volume is considered conservative because if the daily maximum tonnage estimate were to occur over a full 365-day period, the total annual tonnage produced by the mine would be 3.65 million tons, or 1.65 million tons (182.5%) more than the annual tonnage that would be allowed pursuant to SMP 139R1. Where daily tonnage is necessary for analysis of Project impacts, the daily tonnage estimates are utilized in lieu of the annual tonnage estimates in order to provide a conservative estimate of Project-related impacts during daily operating conditions.

B. Project-Related Daily Tonnage Estimates

Based on the physical characteristics of the mine and the operational capacities of the mine operator, the mine operator estimates that a maximum total of 10,000 tons of material per day (inclusive of both aggregate mining and IDEFO activities) could be processed on the proposed Project site following Project approval if operations occurred at maximum capacities. The estimated 10,000 tons of material per day also is consistent with historic operating conditions under the existing permits. Because the Project would consist of 24.26% of the total 2.0 million tons proposed as part of the Project (as described in sub-section 3.2.2A, above), for purposes of analysis it is assumed that the proposed Project would allow for up to a maximum of 2,426 tons per day of aggregate and IDEFO material processing (i.e., 24.26% of 10,000 tons per day).

As the IDEFO begins to operate, aggregate production and sales would be reduced to offset the production from the processing, placing, and compacting of fill materials. Importation of silts and clays from aggregate processing would be from the adjacent mine sites as currently permitted under separate entitlements, and through the use of existing customer truck trips.

C. Project-Related Water Consumption

Water used on-site for dust control and aggregate processing would be obtained from the Elsinore Valley Municipal Water District (EVMWD), as occurs under existing conditions. Based on historical data for the proposed Project site between 1995 and 2009, the water usage on-site averaged approximately 856,000 gallons per day, comprising k100,000 gallons used for dust control and 756,000 gallons associated with processing (i.e., washing sand and gravel). Water consumption is not anticipated to change under the revised permit, as areas subject to dust control on a daily basis would not increase, and processing rates are not anticipated to increase.

D. Operational Equipment

As previously depicted in Table 2-1, equipment used for mining activities during the baseline period required the equivalent of approximately 4,408 horsepower per day. However, during the baseline operating period, the proposed Project site was under different ownership, and the equipment utilized during that period is not reflective of the equipment that would be utilized under the proposed Project.

Table 3-1, *Operational Equipment Summary for Proposed Conditions*, provides a summary of the equipment that would be utilized on a daily basis under the proposed revised SMP 139R1 and under the current

ownership. As shown, equipment used under the proposed Project would require the equivalent of approximately 3,618 horsepower per day, reflecting a 17.9% reduction in horsepower as compared to the baseline condition. This efficiency results from more modern equipment employed by the mine's current ownership as compared to the historic baseline conditions (refer to Appendix J).

E. *Erosion and Sediment Control*

The proposed Project site is graded to capture all surface flows and retain them on-site. Pit walls are sloped and hydro-seeded as excavations reach the outer boundary of the mining area, to prevent rilling and erosion from impacting off-site property. These erosion control measures would be retained under the proposed Project. As occurs under existing conditions, stockpiles of finish materials from the areas proposed for new excavations would be washed, and would contain sufficient moisture to prevent wind erosion. Stockpiles that meet the criteria for preventative erosion measures pursuant to SCAQMD rules would be treated or covered, in compliance with SCAQMD Rule 403.

Table 3-1 Operational Equipment Summary for Proposed Conditions

Hours/Day	Description	Quantity	Horse Power	Total Horse Power
12	775F Haul Truck	2	787	1574
12	769C Haul Truck	0	474	0
16	769C Water Truck	1	474	474
12	988F II Wheel Loader	1	430	430
12	980G Wheel Loader	1	300	300
20	966K Wheel Loader	1	283	283
10	D8T Dozer	1	310	310
4	330 Excavator	1	247	247
Total Daily Operational Horse Power (Proposed Project Conditions):				**3,618**

F. *Blasting*

Existing mining operations within the proposed Project site do not require nor are they permitted to allow the use of explosives. There is no component of the proposed Project that would introduce blasting activities to the property. Therefore, there would be no blasting associated with the proposed Project.

G. *Mine Wastes*

There is no topsoil or overburden on the proposed Project site, as the site has been previously disturbed by the on-going mining activities and any such materials have already been removed. However, topsoil and overburden previously excavated at the site are stockpiled on-site and would be used during reclamation of the site. Silt and clay produced during the washing process is estimated at approximately 7-8% of production, and would total nearly 150,000 tons per year at peak production. The silt and clay produced on-site would be utilized in reclamation, both for revegetation efforts and as a component of the engineered fill operation (IDEFO).

H. *Public Safety*

To prevent trespassing and the associated illegal dumping of debris and the disturbance of revegetation activities, the proposed Project site would continue to be fenced with chain-link fencing and sufficiently marked with signage as currently occurs and as required by the existing permits. A 50-foot setback around the proposed Project site would continue to be maintained after reclamation to prevent public

encroachment into the mining areas. The gates that provide access to the proposed Project site would be locked when the mine is not in operation or open for sales to prevent unauthorized access. In addition, as a private road, Maitri Road would have controlled access through either a locked gate or manned guard shack near the intersection of Maitri Road and Temescal Canyon Road.

3.2.3 Reclamation Plan

Implementation of the Reclamation Plan for the proposed Project site would result in approximately 186 acres of reclaimed property. It should be noted that reclamation activities within off-site impact areas would be specified as part of the future revisions to the adjacent mining permits (i.e., SMPs 143, 150, 182, and 202), but are anticipated to be similar to those described below for the proposed Project.

The reclamation process would entail the operation of an IDEFO to place material in the depleted mining pits and achieve final topography in the form of an engineered fill. This fill process would be required to be compatible with underlying soils and site constraints. In areas where it can be achieved, compaction would be of a high enough standard to allow future development of the reclaimed property that is consistent with the land uses permitted on the site pursuant to the County's General Plan (redeveloped as opposed to open space). There are currently no plans for future development of the proposed Project site beyond the reclamation efforts as set forth by the reclamation plan associated with SMP 139R1. Any future development would be highly speculative to assume at this time and as such, future development is not speculated upon in this MND (CEQA Guidelines § 15145).

Reclamation efforts would occur concurrent with mining activities. All reclamation activities would occur in conformance with the proposed Reclamation Plan, which is presented on Figure 3-2 and Figure 3-3 (previously presented). The Reclamation Plan identifies the excavation limits and final contours to be achieved through the reclamation process.

Any pond areas remaining on-site would be backfilled and/or graded to the elevations specified on the Reclamation Plan. All overburden piles and stockpiles also would be graded to the elevations specified on the Reclamation Plan. Any residual material would be used for contouring and slope enhancement. The existing stationary processing plant as well as all on-site ancillary buildings and structures would be dismantled and removed during the final stages of mining, concurrent with reclamation. The material mined during the last stages of the Project would be processed using smaller, portable equipment. None of the existing structures from the aggregate plant would remain on-site post-reclamation.

Upon completion of reclamation, the proposed Project site would be contoured from south to north, as shown on Figure 3-2 and Figure 3-3. In areas where slopes remain, fill slopes would be contoured at a ratio of 3:1 (Horizontal:Vertical). On the top or surface of the IDEFO, soil stabilizers would be utilized for dust control as required by the Reclamation Plan.

Due to the proposed Project site's location within an alluvial fan, the Reclamation Plan is designed to account for drainage flows from Mayhew Canyon. Post-reclamation drainage would include engineered features that specifically include a down-structure similar in capacity to the existing down-structure on SMP 139, and a basin as shown on the Reclamation Plan. Water would collect within the basin and percolate into groundwater. Following reclamation, the detention basin would be maintained by the Project Applicant so as to not create a public health hazard or nuisance.

Prior to final reclamation, a Phase I Environmental Site Assessment (ESA) would be conducted on the site, as required by the Reclamation Plan, to certify that the property is environmentally clean and in suitable condition for future use. The purpose of a Phase I Site Assessment is to identify, through

research and visual inspection, any environmental problems resulting from the use of hazardous materials, including:

- Evaluating storage, handling, treatment, and disposal of materials and waste;
- Investigating site for evidence of underground storage tanks or spills;
- Researching history of the facility, soil type, and ground and surface water; and
- Reviewing the regulatory files on sites surrounding the property and/or properties.

Reclamation activities are proposed to be completed by December 31, 2068 and would coincide with the cessation of mining activity. Reclamation of slopes and the pit areas may progress at differing rates, depending on market demand for the IDEFO operation.

Re-vegetation would consist of the native seed mix required by the Reclamation Plan which is summarized in Table 3-2, *Reclamation Seed Mix*.

One year after seeding, the proposed Project site would be assessed for success of seeding efforts and erosion control. Remedial actions that may be required as a result of such monitoring could include removal of non-native species, reseeding if necessary, and replacement of erosion control devices. Monitoring would be performed annually for a period of five years after reclamation, or until the success criteria have been met. The success criteria for the revegetation plan is 35 percent of the cover, density, and diversity of perennial species on-site at the end of reclamation compared to the reference areas on adjacent lands.

Table 3-2 Reclamation Seed Mix

Species	Quantity
Jojoba (*Simmondsia chinensis*)	5 lbs/acre
California Buckwheat (*Erigonum fasciculatum*)	10 lbs/acre
Sugar Bush (*Rhus ovate*)	4 lbs/acre
White Sage (*Salvia apiana*)	3 lbs/acre
Laurel Sumac (*Rhus laurina*)	2 lb/acre
Plantago (*Annual Nurse Crop*)	10 lb/acre
Total	**34 lbs/acre**

Financial Assurances for the Reclamation Plan are currently in-place, and were prepared in accordance with the SMARA's *Financial Assurance Guidelines* (2004). The Financial Assurance Cost Estimate (FACE) is required to be updated on an annual basis, and submitted for review and approval to the Riverside County Building and Safety Department. The Financial Assurances would be used to ensure that all of the requirements of the Reclamation Plan are implemented to the satisfaction of both SMARA and Riverside County.

APPENDIX A:

INITIAL STUDY/ENVIRONMENTAL ASSESSMENT NO. 42476

COUNTY OF RIVERSIDE
ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (E.A.) Number: 42476
Project Case Type (s) and Number(s): Surface Mining Permit 00139R1 (SMP 139R1)
Lead Agency Contact Person: David Jones
Telephone Number: (951) 955-6863
Lead Agency Name: County of Riverside Planning Department
Lead Agency Address: P.O. Box 1409, Riverside, CA 92505-1409
Applicant Contact Person: Todd Pendergrass
Telephone Number: (951) 277-3900
Applicant's Name: Mayhew Aggregates & Mine Reclamation (MAMR)
Applicant's Address: P.O. Box 77850, Corona, CA 92877
Engineer's Name: Bonadiman & Associates, Inc.
Engineer's Address: 234 N. Arrowhead Ave., San Bernardino, CA 92408

I. PROJECT INFORMATION

A. Project Description: The proposed Project consists of applications for a Surface Mining Permit Revision (SMP 00139R1). A summary of the entitlements sought by the Project Applicant associated with the proposed Project is provided below. Please refer to the Mitigated Negative Declaration (MND) for a detailed description of the proposed Project, an overview of the Project's history, operational characteristics associated with the proposed Project, planned reclamation activities, and the relationship of the proposed Project to areas planned for future disturbance pursuant to future discretionary approvals.

SMP 139R1: SMP 00139R1 ("SMP 139R1") consists of a proposal to consolidate the activities allowed under several existing permits (PP 1828, RCL 106, and SMP 139) under a single, comprehensive entitlement for the property. Areas permitted for mining on the approximately 215 acre site would consist of approximately 186 acres, concentrated in the western portions of the site. All uses currently permitted under PP 1828, SMP 139, and RCL 106, including the existing, on-site concrete batch-plant, would be combined under SMP 139R1. Approval of SMP 139R1 would extend the life of the existing entitlements by approximately 50 years (from January 2018 to December 31, 2068), and would reduce the total annual tonnage allowed at the mine to 2,000,000 tons per year (reflecting a reduction of 3,020,000 million tons per year as compared to the existing entitlements). The 2,000,000 tons per year allowed by the proposed Project would include materials from both the aggregate mining operations as well as from the Inert Debris Engineered Fill Operation ("IDEFO"), which is described below.

Additionally, SMP 139R1 proposes to amend the reclamation area to include on-site and adjacent off-site areas forming the slopes and setbacks that comprise the boundaries between the on-site mining pits and off-site existing mining pits located on adjacent properties (which conduct extraction operations under separate approved permits [SMP 143, SMP 150, SMP 182, and SMP 202]). Amending the reclamation area ultimately would result in the creation of a single, integrated pit instead of 3 separate pits as occurs under existing conditions. Additionally, the down-drain structure that occurs along the southern slopes of the existing SMP 139 pit would need to be relocated to the south in order to allow for the mining of the slopes and setback areas between SMP 139R1 and the off-site mining pits. Conditions of approval applied to SMP 139R1 would restrict mining of the on- and off-site slopes and setbacks (and relocation of the down-drain structure) until the permits for these adjacent mining sites are revised and approved to account for the geographic expansion in mining

activities. The additional reserves made accessible in the on- and off-site areas would total approximately 46,000,000 tons.

For purposes of fully analyzing the environmental effects of the proposed Project, it is assumed that approval of SMP 139R1 would result in the excavation and removal of aggregate materials within both the on- and off-site slopes and setback areas. This assumption is necessary because the engineering requirements associated with the excavation of the on-site portions of these slopes and setback areas would result in physical disturbance to off-site areas. Therefore, even though the on-site slopes and setback areas cannot be processed until such a time that the permits for the adjacent mines are revised to accommodate the processing of off-site portions of the slopes and setbacks, these off-site areas are nonetheless included as part of the Project evaluated herein.

To achieve final reclamation of the property, the Project proposes to operate an Inert Debris Engineered Fill Operation ("IDEFO") as part of SMP 139R1. Generally, the IDEFO would allow the mining operator to import inert construction debris to the property and then process those materials on-site as part of the reclamation plan for mining operations associated with SMP 139R1. The IDEFO would be an instrumental part of reclamation efforts to generate fill for the excavated areas of the Project site, which would initially commence along the eastern property line. Reclamation in this area involves flattening existing slopes, then filling portions of the excavated area to create usable parcels for future development. The IDEFO would complement existing reclamation activities on the site, which currently includes the use of silts and clays excavated from on-site and adjacent mining operations as fill material.

There would be no importation of domestic garbage, chemicals, oil, or other waste into the Project site as part of the proposed Project; only IDEFO-approved materials would be imported as part of SMP 139R1 (i.e., concrete, asphalt, brick, tile, clay, etc.). Waste in the form of domestic garbage generated by the mining employees and the on-site office (i.e. small amounts of paper, food scraps, containers, etc.) would be disposed of by a licensed municipal waste hauler on a weekly basis, as occurs under existing conditions.

SMP 139R1 also identifies the proposed timetables and estimated completion target dates for the Project. Reclamation is proposed to be completed by December 31, 2068 to coincide with the cessation of mining activity. Reclamation of slopes and the pit areas may progress at differing rates, depending on market demand for the IDEFO operation. Although reclamation will prepare the property for future development, there are currently no plans for developing the site upon completion of the reclamation activities. Any future development would be highly speculative to assume at this time and as such, future development is not speculated upon in this MND (CEQA Guidelines § 15145).

B. Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

C. Total Project Area: Approximately 215 Acres

Residential Acres:	**Lots:**	**Units:**	**Projected No. of Residents:**
Commercial Acres:	**Lots:**	**Sq. Ft. of Bldg. Area:**	**Est. No. of Employees:**
Industrial Acres:	**Lots:**	**Sq. Ft. of Bldg. Area:**	**Est. No. of Employees:**
Other: Surface Mining (+/- 215 acres)	**Lots:** N/A	**Sq. Ft. of Bldg. Area:** N/A	**Est. No. of Employees:** 10

D. Assessor's Parcel No(s): 290-060-043, 290-110-012, -015, -017, -019, -024, -025

E. Street References: The site is on the southeast corner of Temescal Canyon Road and Maitri Road, southerly of Temescal Canyon Road, easterly of Maitri Road, and southwesterly of Campbell Ranch Road.

F. **Section, Township & Range Description or reference/attach a Legal Description:** Section 11, Township 5 South, Range 6 West & Section 2, Township 5 South, Range 6 West.

G. **Brief description of the existing environmental setting of the project site and its surroundings:** The proposed Project site is currently operated as an existing sand and gravel pit. The site is surrounded by chain-link fencing and marked with signage. A 50-foot setback around the property is currently observed as required to minimize public encroachment into the mining areas. The central portion of the proposed Project site contains an existing aggregate desilting basin. In the south-central portion of the property is the main aggregate mining pit. Mayhew Creek was channeled into this pit via a down-structure constructed in late 2005 along the southern slope of the main aggregate pit to capture flows from this creek and protect upstream properties from headwater erosion. The existing pit is sufficiently sized to capture and retain multiple 100-year storm events, effectively cutting Mayhew Creek off from the original flow line; thus, flows from the Mayhew Creek are no longer discharged from the site to downstream areas.

In the west-central portion of the proposed Project site is an existing processing plant, comprised of a crushing station, several conveyors, a surge pile, a washing and sizing station, and storage areas. Throughout the proposed Project site are a variety of gravel stockpiles and washed sand stockpiles, in addition to dirt roadways that facilitate the mining operations.

The only portions of the proposed Project site that remain relatively undisturbed under existing conditions include approximately six (6.0) acres along the eastern boundary of the property that consist of sage scrub habitat occurring on the upper banks of a riverine feature that collects in the northeastern corner of the proposed Project site. The northeastern corner of the proposed Project site was at one time actively mined, but now contains riparian vegetation. Disturbed habitat also occurs along the southwestern, southern, and southeastern perimeter of the proposed Project site, along the upper portions of the existing slopes.

Areas located off-site that may be subject to future disturbance as a result of the proposed Project include areas to the west, southwest, and south. A portion of the off-site disturbance area encompasses Maitri Road, an improved roadway located along the western boundary of the Project site, and portions of an east-west improved roadway located along the southern boundary of the Project site. Off-site impact areas located west of Maitri Road encompass a portion of an existing mining site (SMP 202) and include existing slopes, unpaved roads, a desilting pond, equipment storage areas, and several existing stockpiles. Sparse areas of disturbed natural vegetation occur along the southern and southeastern slopes of the SMP 202 site (i.e, disturbed Riversidean sage scrub and coast live oak). To the south of the SMP 202 site is an existing administrative building and paved parking lot with existing ornamental vegetation (which is not anticipated to be impacted by future mining activities) as well as natural habitat (i.e., chaparral and Riversidean sage scrub). At the southern edge of the off-site impact area is an existing access roadway serving a water tank.

Impact areas to the south of the proposed Project site (and southerly of the east-west access road) encompass a separate existing mining operation (SMP 143, SMP 150, and SMP 182). These areas are fully disturbed and include numerous unpaved roadways, overhead utility lines, a paved parking area, a trailer, storage sheds, several conveyer belts, a desilting pond, weigh station, crushing station, surge pile, washing and sizing station, and several existing stockpiles. Disturbed habitat occurs west of the desilting pond (i.e., disturbed Riversidean sage scrub), and several existing trees and ruderal vegetation abut the southern edge of the east-west access road.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

1. **Land Use:** The proposed Project site and off-site impact areas are located within the Temescal Canyon Area Plan of the County of Riverside's General Plan, and do not fall within a General Plan Policy or a General Plan Policy Overlay Area. Riverside County's General Plan and the Temescal Canyon Area Plan (TCAP) identify the Project site and off-site impact areas for "Open Space Mineral (OS-MIN)," which allows for the currently permitted use of mineral extraction and processing facilities.

2. **Circulation:** the proposed Project was reviewed for conformance with County Ordinance 461 by Riverside County Transportation Department. Adequate circulation facilities exist and are proposed to serve the proposed Project. The proposed Project meets with all applicable circulation policies of the General Plan.

3. **Multipurpose Open Space:** No natural open space land is required to be preserved within the boundaries of this Project. The proposed Project meets with all other applicable Multipurpose Open Space Element Policies.

4. **Safety:** The proposed Project allows for sufficient provision of emergency response services to the existing and future users of this Project through the Project's design. The proposed Project meets with all other applicable Safety Element policies.

5. **Noise:** The proposed Project meets with all applicable Noise Element policies. In addition, a Noise Study completed on December 24, 2012 by Hans Giroux shows that the proposed Project would not exceed Riverside County noise standards.

6. **Housing:** No housing is proposed by this Project, nor will the Project displace any existing housing. There are no impacts to housing as a direct result of this Project.

7. **Air Quality:** The proposed Project is conditioned by Riverside County to control any fugitive dust during mining and processing activities. An Air Quality and Greenhouse Gas Evaluation Report completed by Associates Environmental and dated January 2013, determined that the proposed Project: would not exceed the SCAQMD's regional emission significance threshold for any criteria pollutant during its operation; would not increase cancer and non-cancer health risks; and would not create objectionable odors that affect sensitive receptors. Therefore, the proposed Project would not result in a significant impact to air quality.

B. General Plan Area Plan(s): Temescal Canyon Area Plan

C. Foundation Component(s): Open Space

D. Land Use Designation(s): Open Space – Mineral Resources (OS-MIN)

E. Overlay(s), if any: None

F. Policy Area(s), if any: None

G. Adjacent and Surrounding Area Plan(s), Foundation Component(s), Land Use Designation(s), and Overlay(s) and Policy Area(s), if any: The proposed Project site and off-site impact areas, all occur within the Temescal Canyon Area Plan. In addition, the proposed Project site and off-site impact areas do not fall within a General Plan Policy Area or

a General Plan Policy Overlay Area. General Plan designations surrounding the proposed Project site include the following: OS-MIN to the west; OS-MIN to the south; "Open Space – Conservation (OS-C)," "Open Space Recreation (OS-R)," and "Medium Density Residential (MDR)" to the east; and "Light Industrial (LI)," "Business Park (BP)," and "Medium High Density Residential (MHDR)" to the north.

H. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** Not within a Specific Plan.

2. **Specific Plan Planning Area, and Policies, if any:** None.

I. Existing Zoning: M-R-A (Mineral Resources and Related Manufacturing)

J. Proposed Zoning, if any: No Proposed Change

K. Adjacent and Surrounding Zoning: M-R-A to the west; M-R-A and "Natural Assets (N-A)" to the south; "Specific Plan Zone (SP Zone) (Sycamore Creek Specific Plan) to the east; and SP Zone, "Manufacturing-Service Commercial (M-SC)," "Commercial Office (C-O)," and "Mobile Home Subdivisions & Mobile Home Parks (R-T)" to the north.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Agriculture & Forest Resources	☒ Hydrology / Water Quality	☒ Transportation / Traffic
☐ Air Quality	☐ Land Use / Planning	☐ Utilities / Service Systems
☒ Biological Resources	☐ Mineral Resources	☐ Other:
☐ Cultural Resources	☐ Noise	☐ Other:
☒ Geology / Soils	☐ Population / Housing	☐ Mandatory Findings of Significance
☐ Greenhouse Gas Emissions	☐ Public Services	

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project, described in this document, have been made or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment, **NO NEW ENVIRONMENTAL DOCUMENTATION IS REQUIRED** because (a) all potentially significant effects of the proposed project have been adequately analyzed in an earlier EIR or Negative

Declaration pursuant to applicable legal standards, (b) all potentially significant effects of the proposed project have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, (c) the proposed project will not result in any new significant environmental effects not identified in the earlier EIR or Negative Declaration, (d) the proposed project will not substantially increase the severity of the environmental effects identified in the earlier EIR or Negative Declaration, (e) no considerably different mitigation measures have been identified and (f) no mitigation measures found infeasible have become feasible.

☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An **ADDENDUM** to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.

☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a **SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT** is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.

☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and **a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT** is required: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following:(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or,(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

Signature

Date

For Carolyn Syms Luna, Planning Director

Printed Name

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed project to determine any potential significant impacts upon the environment that would result from construction and implementation of the project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the project				
1. Scenic Resources a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☒	☐

Source: General Plan Figure C-9, "Scenic Highways;" On-site Inspection.

Findings of Fact:

a) The proposed Project site and off-site impact areas are located approximately 0.14 mile southwest of Interstate 15 (I-15), which is identified as a "State Eligible Scenic Highway." However, due to intervening vegetation, topography, and existing development within the Sycamore Creek Specific Plan, areas proposed for disturbance or future reclamation efforts are not prominently visible from I-15. Intermittent views of the site for southbound traffic along I-15 are only occasionally afforded, while the site is not visible to traffic traveling northbound on I-15. All views of the Project site and off-site impact areas from locations 0.15-mile or more south of Temescal Canyon Road are obstructed by existing development. Accordingly, the proposed Project would not have a substantial effect upon a scenic highway corridor, and no impact would occur.

b) The proposed Project site and off-site impact areas comprise existing aggregate mining operations and do not contain any scenic resources. Areas not currently impacted by mining but that would be impacted by future mining activities also do not comprise a scenic resource. The Project site and off-site impact areas do not contain any visually prominent trees, rock outcroppings, or other unique or landmark features. Although the Project would allow for expanded areas of mining, such areas would not appear markedly different from areas currently impacted by mining activities. Furthermore, the proposed Project includes a Reclamation Plan that would remediate all deleterious visual effects associated with the site under both existing and proposed conditions. Therefore, the proposed Project would not result in the creation of an aesthetically offensive site open to public view, and impacts would be less than significant.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. Mt. Palomar Observatory a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?	☐	☐	☐	☒

Source: GIS database, Ord. No. 655 (Regulating Light Pollution); TCAP, Figure 6 (Mt. Palomar Nighttime Lighting Policy).

Findings of Fact: The Project site is located 44.29 miles from the Mt. Palomar Observatory from its closest point. The limit of the Mt. Palomar Observatory Special Lighting area is 45 miles. The proposed Project would be required to comply with the County Light Pollution Standard (Ord. No. 655), which is also applicable to the site's current mining operations. Ord. No. 655 is designed to prevent significant lighting impacts that could affect the nighttime use of the Mt. Palomar Observatory. Additionally, changes to the existing mining operations proposed by the Project would not generate new sources of excessive light pollution, and lighting would not increase beyond what occurs under existing conditions. Accordingly, no impact to the Mt. Palomar Observatory would occur with implementation of the proposed Project.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

3. Other Lighting Issues a) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
b) Expose residential property to unacceptable light levels?	☐	☐	☐	☒

Source: On-site Inspection, Project Application Materials

Findings of Fact:

a & b) The proposed Project would not introduce any new sources of lighting beyond what occurs under existing conditions, which is required to operate in conformance with the County Light Pollution Standard (Ord. No. 655). Accordingly, the proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, nor would the Project expose residential property to unacceptable light levels. No impacts would occur.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

AGRICULTURE & FOREST RESOURCES Would the project				
4. Agriculture a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source: General Plan, Figure OS-2 (Agricultural Resources); GIS database; Project Application Materials.

Findings of Fact:

a) According to agricultural lands mapping available from Riverside County GIS, the majority of the proposed Project site and off-site impact areas are identified as containing "Other Lands," with a very small area in the southeastern corner of APN 290-110-025 containing "Urban-Built Up Land." No portion of the proposed Project site or off-site impact areas contain land mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide importance. Implementation of the proposed Project would not result in the conversion of any farm lands to non-agricultural use because no farmlands exist on the property. Accordingly, no impact would occur.

b, c & d) There are no lands zoned for agricultural production or that are under active production located within close proximity to the proposed Project site or off-site impact areas. In addition, the nearest agricultural preserve is located approximately 0.8 mile to the southeast of the Project site (Glen Ivy 1 Agricultural Preserve). There are no components of the proposed Project that have the potential to conflict with any existing agricultural zoning, agricultural uses, or Agricultural Preserves. The proposed Project also would not result in the conversion of Farmland to non-agricultural use. Accordingly, no impact would occur.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

5. Forest a) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?	☐	☐	☐	☒
b) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Source: General Plan, Figure OS-3 (Parks, Forests and Recreation Areas); Project Application Materials.

Findings of Fact:

a, b & c) The subject property is an existing surface mine that has been in operation for over 35 years. There are no timber or forest lands on site. No lands within the Project vicinity are zoned for forest land, timberland, or Timberland Production. The Project therefore would have no potential to conflict with such zoning designations, nor would the Project result in the loss of forest land or conversion of forest land to non-forest use. There are no components of the proposed Project that would result in changes to the existing environment which could result in the conversion of forest land to non-forest use. Therefore, no impact would occur.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

AIR QUALITY Would the project				
6. Air Quality Impacts a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions?	☐	☐	☐	☒
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?	☐	☐	☐	☒
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Source: *Air Quality and Greenhouse Gas Evaluation Report for Surface Mining Permit Revision (SMP 139R1) & Conditional Use Permit (CUP 03679).* Associates Environmental, July 2013; *Final 2012 Air Quality Management Plan.* South Coast Air Quality Management District, December 2012.; *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Stationary Source Division. Mobile Source Control Division.* California Air Resources Board, October 2000; *2009 Air Quality Almanac.* California Air Resources Board, 2009; *SCAQMD Air Quality Significance Thresholds.* South Coast Air Quality Management District, March 2011. .

Findings of Fact:

a) The Project site is located within the South Coast Air Basin (SCAB) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is principally

responsible for air pollution control and has adopted a series of Air Quality Management Plans (AQMPs) to reduce air emissions in the Basin. Most recently, the SCAQMD Governing Board adopted the Final 2012 AQMP for the SCAB, on December 7, 2012. The 2012 SCAQMD AQMP is based on motor vehicle projections provided by the California Air Resources Board (CARB) in their EMFAC 2007 model and demographics information provided by the Southern California Association of Governments (SCAG).

The proposed Project represents the continuation of an existing mining operation, which is operating in conformance with the site's existing General Plan and zoning land use designations. Since the assumptions utilized in the AQMP rely, in part, on the land use information from local agencies, and because the proposed Project is consistent with those land use designations, the proposed Project would not conflict with the assumptions utilized in the AQMP. Furthermore, and as discussed under the analysis of Issue 6.b) and 6.c), the proposed Project would not result in significant impacts associated with operational emissions. Therefore, the proposed Project would not conflict with or obstruct implementation of the 2012 AQMP, and no impact would occur.

b & c) The proposed Project is the continuation of an existing mining operation. As explained in Section 3.2.2 of the MND, the proposed Project would represent approximately 24.26% of the total tonnage mined on a daily or annual basis at the Project site, representing a 32% increase over historical baseline conditions. However, under the proposed Project, total horsepower used per day would be reduced by approximately 17.9% as compared to historical baseline conditions.

Additionally, the proposed Project would use on-road diesel equipment in its operations that is more efficient (and therefore less polluting) than was used under historic baseline conditions because of the requirement to comply with more stringent state and federal emission control standards. Specifically, future mining operations under SMP 139R1 would be subject to the following requirements, which were not applicable under the historic baseline operating period:

- The Project would be required to comply with the provisions of South Coast Air Quality Management District Rule 431.2, "Sulfur Content of Liquid Fuels."

- The Project would be required to comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles."

- The Project would be required to comply with California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling."

Because CEQA requires a comparison of the proposed Project's impacts to the historical baseline condition, impacts to air quality must then provide a comparison between the emissions that occurred under the historic baseline conditions and the emissions that would occur under the proposed Project. The differential between the historic baseline emission levels and the emission levels that would occur under the proposed Project can then be compared against the SCAQMD regional thresholds to determine if significant impacts would occur.

As shown in Table EA-1, *Baseline Conditions vs. Project Emissions Summary*, implementation of the proposed Project would result in a net reduction in Reactive Organic Gas (ROG) emissions, nitrogen

oxide (NO_x) emissions, carbon monoxide (CO) emissions, sulfur oxide (SO_2) emissions, and fine particulate matter ($PM_{2.5}$), and a net increase in particulate matter (PM_{10}) emissions. The net increase in PM_{10} emissions of 140.83 pounds per day (lbs/day) would be less than the SCAQMD regional threshold of 150 lbs/day. It should be noted that although the Project would extend the life of the existing mining permits by an additional 50 years, daily emissions associated with the Project would be as presented in Table EA-1; accordingly, the proposed extension of the expiration date of the permit would not result in any direct or cumulatively significant air quality impacts, since the daily emissions would not exceed the SCAQMD regional thresholds.

Table EA-1 Baseline Conditions vs. Project Emissions Summary

	ROG Emissions (lbs/day)	NO_x Emissions (lbs/day)	CO Emissions (lbs/day)	SO_2 Emissions (lbs/day)	PM_{10} Emissions (lbs/day)	$PM_{2.5}$ Emissions (lbs/day)
Baseline	82.43	890.03	356.68	6.26	519.44	36.37
Project	45.32	470.85	186.30	0.60	660.27	23.20
Change in Emissions	**-37.21**	**-419.18**	**-170.38**	**-5.66**	**140.83**	**-13.17**
Significant impact threshold	**55**	**55**	**550**	**150**	**150**	**55**
Is there significant impact?	**No**	**No**	**No**	**No**	**No**	**No**

All of the reduced pollutant emission quantities (ROG, NO_x, CO, SO_2 and $PM_{2.5}$), are credited to the reduced amount of diesel exhaust from off-road equipment and on-road transport of material that would occur with implementation of the proposed Project and mandatory compliance with more stringent state and federal emission control requirements. Off-road diesel equipment emissions would be reduced because the off-road diesel fleet proposed to be used in Project operations would include fewer vehicles using 17.9% less horsepower. On-road diesel emissions also would decrease as compared to baseline conditions despite the increase in truck trips because the SCAQMD's California Emissions Estimator Model (CalEEMod) takes into account the change in emission standards for on-road trucks (which are summarized above); thus, the CalEEMod assumptions for the Project's operating year (2013 and beyond) assumes compliance with the new standards, while no credit is applied to on-road truck emissions that operated under the historical baseline period. As the Project is implemented, the truck fleet servicing the Project site would be cleaner and more efficient than occurred under the historic baseline period. As time progresses, truck exhaust emissions would continue to fall as more state and federal laws regulating diesel fueled vehicles become effective; however, for purposes of analysis, the CalEEMod assumes the truck fleet as it would exist in year 2013.

The one pollutant that would increase as a result of the proposed Project is PM_{10}, which is dominated by dust entrained into the air from trucks. The dust comes from vehicle brake wear and Project site dirt track out. Because robust dust control practices are already being implemented at the Project site, an increase in the production of mined materials and associated vehicle traffic would result in a proportionally equal increase in PM_{10} emissions. Since the increase in PM_{10} emissions is below the significance threshold, a significant impact would not result.

Based on the analysis presented above, the proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and a less than significant impact would occur. In addition, although the SCAB is considered a non-attainment status area for ozone, particulate matter, and NO_x, the proposed Project would not result in emissions of any of these criteria pollutants (or precursors to these criteria pollutants) that exceed SCAQMD thresholds. Additionally, the proposed Project would reduce pollutant emissions compared to the historic baseline condition for all but PM_{10} emissions. As noted above, although the Project would extend the expiration date of the existing permits by a period of 50 years, daily emissions would not exceed the SCAQMD regional thresholds; therefore, the extension of time for the permits would not result in any direct or cumulatively significant impacts. For these reasons, the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, and a less than significant impact would occur.

d) The proposed Project does not involve any land uses that have the potential to generate substantial amounts of point-source emissions. Diesel equipment operated by the Project, however, would emit diesel particulate matter (DPM) that has the potential to expose sensitive receptors to an increased cancer risk in excess of established thresholds of significance. Additionally, the Project has the potential to create or contribute to CO hotspots. Each of these issues is discussed below.

Diesel Particulate Matter

The California Air Resources Board (CARB) has determined that DPM is a carcinogen, although it does not have acute health impacts. DPM is released in the exhaust of diesel combustion. For the most part, diesel emissions are created by mobile vehicles and portable equipment. Since vehicular traffic sources tend to operate while moving (i.e., along roadways) or are moved periodically (i.e., to different locations within a site), the emissions from these sources are dispersed over a large area. In the case of on-road diesel trucks, most of the emissions occur offsite from projects that attract diesel trucks, except when such trucks are idling on-site.

The SCAQMD conducted an in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California. This study, entitled, *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES III*, predicted an excess cancer risk of between 192 to 294 in one million for the Project area. DPM is included in this cancer risk along with all other toxic air contaminant (TAC) sources. DPM accounts for 83.6% of the total risk shown in MATES III. The threshold for significant direct and cumulative impacts included in SCAQMD guidance to CEQA lead agencies (*SCAQMD Air Quality Significance Thresholds*, South Coast Air Quality Management District, March 2011) and used by Riverside County is a risk increase of 10 in one million. In practice, this widely accepted significance threshold assumes that an increase in cancer risk of 10 in one million is sufficiently stringent to represent a significant cumulative contribution no matter what the level of existing and projected impact from other sources in the vicinity.

Risk from toxic air contaminant emissions is declining rapidly across California due to regulations adopted at the federal, state, and air district levels. The CARB Diesel Risk Reduction Plan (DRRP)

led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce diesel particulate matter DPM emissions by about 90 percent overall from year 2000 levels as stated on page 1 of the DRRP. The projected emission benefits associated with the full implementation of this plan (p. 2), including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010 and 85 percent by 2020 (ARB 2000). According to the ARB Almanac 2009 (pp. 5-51 and 52), "In the South Coast Air Basin, the estimated health risk from diesel PM was 720 excess cancer cases per million people in 2000. Although the health risk is higher than the statewide average, it represents a 33 percent drop between 1990 and 2000." Other sources of toxic air contaminates described in the ARB Almanac have achieved similar reductions and continue to achieve a downward trajectory of risk over time. Therefore, overall reductions in cancer risk are anticipated to continue to accrue for the foreseeable future as current and more stringent state and federal regulations are implemented and older, less controlled vehicles and equipment are retired or retrofitted with required pollution control devices. Due to the reduced mobile emissions, risk will decline from sources such as freeways, high volume roadways and distribution centers, even as they accommodate increases in travel and economic activity.

The Project can only pose an increase to cancer risk and acute and chronic non-cancer illness if it substantially increases toxic emissions over the baseline, resulting in an increased cancer risk of 10 in one million or more. The analysis conducted for the proposed Project calculated the annual release of toxics from the baseline Project site and during proposed Project operations using CalEEMod. The CalEEMod results reveal the emissions of diesel engines as exhaust PM_{10} and exhaust $PM_{2.5}$. For the sake of analysis, PM_{10} is used because PM_{10} is inclusive of $PM_{2.5}$.

As indicated above under the analysis of Issues 6.b) and 6.c), the proposed Project represents the continuation of an existing mining operation. Therefore, in evaluating the Project's potential impact due to DPM emissions, it is necessary to compare the total DPM emissions that would result from implementation of the proposed Project to those that occurred under historic baseline conditions. As indicated in MND Section 3.2.2.A., DPM emissions under historic baseline conditions were associated with the annual production of 1,514,801 tons per year, whereas total DPM emissions under the proposed Project would be associated with 2.0 million tons per year.

The historic baseline condition and the proposed Project only have two sources of DPM: off-road diesel equipment and on-road diesel trucks hauling material. Table EA-2, *Project-Related Diesel Particulate Emissions*, presents the DPM emissions associated with the historic baseline condition ("Project Site Baseline") and the total DPM emissions that would occur under the proposed Project ("Project Site Project"). As shown in Table EA-2, total DPM emissions under the proposed Project would be reduced by 2.41 tons per year, from 4.66 tons per year to 2.25 tons per year. The reason for this reduction is that the DPM emissions under the baseline conditions involved the use of older diesel trucks, whereas the proposed Project is required to comply with recently enacted state and federal emission control requirements which would phase out the use of older truck engines and replace them with newer, more efficient (and less DPM emitting) engines over time refer (as discussed above, refer also to the discussion under Issues 6.b) & 6.c)). DPM emission reductions associated with fleet turnover also are reflected in the CalEEMod outputs, which were used in estimating the baseline and total (baseline plus Project) DPM emissions.

Table EA-2 Project-Related Diesel Particulate Emissions

	DPM (Exhaust PM_{10}) Tons/yr
Project Site Baseline	
Off-Road	3.36
Hauling	1.29
Total	**4.66**
Project Site Project	
Off-Road	1.61
Hauling	0.83
Total	**2.25**
Change in Emissions with Project Implementation	
Total	**-2.41**
***Some totals include discrepancies created by rounding in the CalEEMod output**	

Since DPM emissions would be reduced under the proposed Project, and since the cancer risk is directly related to the amount of DPM emissions, the cancer risk associated with the Project's DPM emissions also would decrease under the proposed Project as compared to historic baseline conditions. Since the cancer risk would be reduced under the proposed Project, then the proposed Project's incremental cancer risk would be negative, and therefore would not exceed SCAQMD's significance threshold for direct and cumulative impacts of 10 in one million. Although the Project would result in the extension of the expiration date for the existing mining permits by a period of 50 years, a significant impact to sensitive receptors would not occur due to the net decrease in DPM emissions that would occur under the proposed Project. Furthermore, the Project would not result in an increase in the incremental cancer risk of 10 in one million; thus, the extension of the expiration date of the existing mining permits would not result in a significant direct or cumulative impact to sensitive receptors. Because the overall cancer risk would decrease under the proposed Project as compared to historic baseline conditions, the proposed Project would not expose sensitive receptors which are located within one (1) mile of the Project site to substantial point source emissions.

As indicated above, MATES III predicted an excess cancer risk of between 192 to 294 in one million for the Project area. Since the overall DPM emissions would be reduced under the proposed Project, thereby resulting in an overall reduction in the incremental cancer risk associated with DPM emissions directly attributable to the Project site, it can therefore be concluded that the cumulative excess cancer risk in the Project vicinity (192 to 294 in one million per MATES III) would be reduced as compared to the historic baseline conditions.

Therefore, because Project-related DPM emissions would decrease as compared to historic baseline conditions and because both Project-related and cumulative incremental cancer risks related to DPM emissions also would be reduced as compared to historic baseline conditions, a less than significant impact to sensitive receptors from Project-related point source emissions would occur.

CO Hot Spots

Areas of high vehicle congestion used to have the potential to create areas with CO concentrations high enough to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. The SCAB was designated nonattainment of these standards when the SCAQMD CEQA Handbook was written in 1993. SCAQMD performed CO hot spot analyses on the busiest intersections in Los Angeles and did not predict a violation of CO standards, which enabled the SCAB to achieve attainment status in 2007.

With the turnover of vehicles to newer models meeting more stringent emissions standards, CO concentrations in the SCAB have steadily decreased. Other air districts within California with similar pollutant and environmental conditions have established a screening threshold for CO localized impacts; conservatively, in order for a project to generate enough traffic to create a CO significant impact it would have to increase traffic volumes more than 24,000 vehicles per hour under the worst environmental conditions (BAAQMD 2011).

According to the traffic study prepared for the project (Urban Crossroads 2012), implementing the recommended improvements, no intersection has a Level of Service lower than "C" under the "existing plus ambient plus project plus cumulative (2013)" conditions. The intersection with the highest volume of vehicles is I-15 SB Ramps / Temescal Canyon Road with a PM peak of 2,744 vehicles per hour. The proposed project is not anticipated to generate the level of traffic required to rival the busiest intersections of Los Angeles nor does it increase traffic volumes high enough to create a CO hot spot, as the intersection with the highest volume of vehicles would be well below the 24,000 vehicles per hour threshold the BAAQMD estimates would lead to a CO Hot Spot. Therefore localized impacts to air quality related to mobile source emissions would be less than significant.

e) The proposed Project consists of a proposed revision to a mining permit and a conditional use permit to allow for the continuation and eventual reclamation of a mining operation. The operation of an IDEFO is proposed as part of reclamation activities. Mining-related land uses are not sensitive receptors. Thus, the proposed Project would not involve the construction of a sensitive receptor located within one (1) mile of an existing substantial point source emitter, and no impact would occur.

f) Mining operations are not typically associated with the emission of objectionable odors. The Project site has no known historical record of causing objectionable odor complaints. Diesel exhaust and ROG are objectionable to some people but emissions and their associated odors disperse rapidly from the source. Diesel exhaust and ROG emissions would be emitted during Project operations but as discussed above under the analysis of Issue 6.d), pollutant emissions from diesel combustion would be reduced with implementation of the proposed Project. With no historical record of objectionable odor complaints and a reduction in emissions of pollutants that some people would find objectionable, it is reasonable to conclude that the proposed Project would not create objectionable odors affecting a substantial number of people. Accordingly, a less than significant impact due to odors would occur.

Mitigation: No mitigation is required

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Monitoring: No monitoring is required.				
BIOLOGICAL RESOURCES Would the project				
7. Wildlife & Vegetation a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☒	☐	☐
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☒	☐	☐
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☐	☒	☐
f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐

Source: GIS database; WRCMSHCP; On-site Inspection; *Biological Technical Report for the Mayhew Aggregates and Mine Reclamation Project (SMP 139 R1)*. Glenn Lukos Associates, Inc., February 4, 2013; *Oak Tree Survey Report for the Mayhew Aggregates and Mine Reclamation Project (SMP139R1)*. Glenn Lukos Associates, Inc., June 12, 2013; *Mayhew Aggregates – Historic Storm Runoff*, Chang Consultants, June 13, 2013.

Findings of Fact:

a) The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) the applicable habitat conservation/planning program for Western Riverside County.

The Project site occurs within the Temescal Canyon Area Plan portion of the MSHCP. As shown on Figure EA-1, *MSHCP Overlay Map*, the northeast corner of the Project site occurs within MSHCP

Criteria Area, specifically the southwest portion of Criteria Cell #3348 of Cell Group I (Subunit 3: Temescal Wash-West). Volume I, Section 3.3.16 of the MSHCP provides the conservation requirements of Cell Group I as follows:

> *"Conservation within this Cell Group will contribute to assembly of Proposed Extension of Existing Core 2. Conservation within this Cell Group will focus on Riversidean alluvial fan sage scrub, coastal sage scrub, and riparian scrub, woodland, forest habitat. Areas conserved within this Cell Group will be connected to a variety of uplands and wetlands proposed for conservation in Cell Group H to the north, to coastal sage scrub habitat proposed for conservation in Cell #3448 in the Elsinore Area Plan to the south, and to coastal sage scrub, riparian habitat and water proposed for conservation in Cell #3351 in the Elsinore Area Plan to the east. Conservation within this Cell Group will range from 55%-65% of the Cell Group focusing on the northern and eastern portions of the Cell Group."*

Based on the criteria provided in Section 3.3.16, the southwest portion of Criteria Cell #3348 that includes the Project site is not a component of the Proposed Extension of Existing Core 2. Accordingly, no portion of the proposed Project site is targeted for conservation pursuant to the MSHCP Conservation Criteria.

Although habitat conservation is not required on the Project site by the MSHCP, all projects must demonstrate compliance with applicable MSHCP requirements pursuant to the following sections of the MSHCP: Section 6.1.2, "Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools;" Section 6.1.3, "Protection of Narrow Endemic Plant Species;" Section 6.1.4, "Guidelines Pertaining to the Urban/Wildland Interface;" and Section 6.3.2, "Additional Survey Needs and Procedures."

Project Compliance with MSHCP Section 6.1.2

The MSHCP defines riparian/riverine areas as *lands which contain Habitat dominated by trees, shrubs, persistent emergent mosses and lichens, which occur close to or which depend upon soils moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.* The MSHCP defines vernal pools as *seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indictors of hydrology and/or vegetation during the drier portion of the growing season.* With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above, which are artificially created, are not included in these definitions.

An investigation of riparian/riverine areas and vernal pools was undertaken by the Project biologist. The northeast corner of the SMP 139 site supports approximately 4.80 acres of areas with the potential to be considered MSHCP riparian areas, which are mapped as "southern willow scrub" on Figure EA-2, *On- and Off-Site Biological Resources Map*. In addition, approximately 0.43 acre of highly disturbed mulefat scrub that is associated with a former aggregate desilting basin is located off-site within SMP 202.

The 4.80 acres of southern willow scrub habitat depicted on Figure EA-2 is associated with two different hydrological sources. The eastern portion comprises 3.64 acres and occurs outside of areas proposed for disturbance/impact by the proposed Project, while the western 1.16 acres

Legend

- Survey Area
- Criteria Cell
- Narrow Endemic Plants Survey Area
- Criteria Area Species Survey

Source: Glenn Lukos Associates

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NOT TO SCALE

Figure EA-1

MSHCP OVERLAY MAP

Legend

- Survey Area
- Onsite
- Offsite
- ADB - Aggregate Desilting Basin
- CHAP - Chaparral
- CLOW - Coast Live Oak Woodland
- D CHAP - Disturbed Chaparral
- D MFS - Disturbed Mulefat Scrub
- D RSS - Disturbed Riversidean Sage Scrub
- D - Disturbed
- DAS - Disturbed Alluvial Scrub
- R/U/E - Residential/Urban/Exotic
- RSS - Riversidean Sage Scrub
- RSS/CHAP - Riversidean Sage Scrub/Chaparral Ecotone
- SWS - Southern Willow Scrub

Source: Glenn Lukos Associates

T&B PLANNING, INC.

Figure EA-2

ON- AND OFF-SITE BIOLOGICAL RESOURCES MAP

occurs within the areas proposed for impact by the Project. According to the Project's biologist (Glen Lukos Associates), the eastern 3.64 acres located off-site are associated with the MSHCP riparian/riverine area, while the western 1.16 acres located on-site are associated with a former aggregate desilting basin. Aggregate desilting basins are man-made features that are not considered MSHCP riparian/riverine areas. Therefore, the portion of the southern willow scrub habitat that occurs on-site is not considered MSHCP riparian/riverine areas.

Although the 1.16 acres of southern willow scrub habitat occurring on-site is not considered to comprise MSHCP riparian/riverine areas, this area still could provide habitat for sensitive animal species. Accordingly to the Project's biologist (Glen Lukos Associates), the 1.16 acres of MSHCP riparian habitat that occurs on the Project site does not support habitat suitable for the southwestern willow flycatcher (SWWF) or the western yellow-billed cuckoo. The Project site does contain marginally suitable habitat for the least Bell's vireo (LBV) and yellow warbler. While LBV are typically found in riparian habitats, they also require a dense understory of riparian vegetation to support breeding activity. The Project site does not contain the understory preferred by LBV. Therefore, the riparian habitat that is proposed for impacts does not constitute vireo habitat with long-term conservation value. Due to the yellow warbler's low degree of sensitivity and the low quality of riparian habitat occurring within SMP 139R1, impacts to riparian habitat and the yellow warbler also would be less than significant. Based on these factors, and in accordance with MSHCP requirements, the Project's biologist (Glen Lukos Associates) determined that protocol surveys for the LBV, SWWF, and western yellow-billed cuckoo were not required. Accordingly, impacts to the on-site portions of the southern willow scrub would not conflict with MSHCP Section 6.1.2.

The approximate 0.43 acre of highly disturbed mulefat scrub is located within the off-site impact areas. However, this area is associated with a former aggregate desilting basin located on the SMP 202 site. Due to its association with the aggregate desilting basin, the mulefat scrub does not constitute MSHCP riparian/riverine habitat, and impacts to this area would therefore not conflict with MSHCP Section 6.1.2.

No vernal pools were identified within the proposed Project site or off-site impact areas. Therefore, the Project would not impact vernal pools or other ephemeral ponds with the potential to support listed fairy shrimp.

Based on the foregoing analysis, the proposed Project would not result in any impacts to MSHCP riparian/riverine areas or vernal pools; therefore, the proposed Project would be fully consistent with MSHCP Section 6.1.2.

Project Compliance with MSHCP Section 6.1.3

As shown previously on Figure EA-1, portions of the Survey Area occur in the Narrow Endemic Plants Survey Area (NEPSSA). The NEPSSA primarily occurs along the eastern perimeter of the SMP 139 site, within an existing desilting basin in the central portion of the Project site, and within the southwestern portion of the off-site impact areas.

The portions of the NEPSSA that occur on-site (within the SMP 139R1 site) and within SMP 202 (west of the Project site) have been subject to regular disturbance as a result of the active mining operations. The significant level of disturbance associated with mining activity in these areas has resulted in a lack of suitable habitat for special-status plants. Therefore, areas on-site and within SMP 202 are not expected to support special-status plant species including the NEPSSA target

species. Due to a lack of suitable habitat within these areas, target plant surveys for the following NEPSSA species are not required pursuant to the MSHCP: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Slender-horned spineflower (*Dodecahema leptoceras*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt's grass (*Orcuttia californica*), San Miguel savory (*Clinopodium chandleri*), Hammitt's clay-cress (*Sibaropsis hammittii*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*).

In addition, a small portion of the NEPSSA occurs in the extreme northeastern corner of the existing SMP 139 site. However, this area is not proposed for impact as part of the proposed Project; therefore, no impact to NEPSSA target species would occur in this area.

However, the southwestern corner of the off-site impact areas (i.e., southwesterly of the existing office building) includes areas that have not been subject to mining activities or sustained disturbances. Due to the lack of sustained disturbance in this area, approximately 9.1 acres in the southwestern corner of the off-site impact area contains habitat with the potential to support NEPSSA target species. Specifically, the following NEPSSA species have at least a low to moderate potential to occur: Hammitt's clay-cress (*Sibaropsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), Munz's onion (*Allium munzii*), and San Miguel savory (*Satureja chandleri*). Therefore, future impacts within this portion of the off-site impact area would be potentially individually and cumulatively significant as a result of potential loss of suitable habitat for NEPSSA target species. This represents a potential conflict with MSHCP Section 6.1.3 for which mitigation would be required. In order to reduce these potential impacts to below a level of significant, future focused surveys will be required, and mitigation in conformance with MSHCP standards will be required if any focused surveys identify NEPSSA target species within this portion of the off-site impact area. As discussed above, no disturbance of off-site impact areas will occur unless and until future discretionary approvals are obtained, including a determination of compliance with the MSHCP.

Project Compliance with MSHCP Section 6.1.4

Portions of the disturbance areas proposed as part of the Project have the potential to result in significant indirect impacts to special-status biological resources. Such impacts would be avoided, however, through compliance with the MSHCP Urban/Wildlands Interface Guidelines (*Volume I, Section 6.1.4* of the MSHCP). These guidelines are intended to address indirect effects associated with locating projects (particularly development) in proximity to the MSHCP Conservation Area. To minimize potential edge effects, the guidelines are to be implemented in conjunction with review of individual public and private development projects in proximity to the MSHCP Conservation Area including Conserved Public/Quasi-Public (PQP) Lands and Criteria Areas.

The northeast corner of the Project site is located within a MSHCP Criteria Cell #3348, but is not a component of the conservation within Cell Group I. However, MSHCP Volume I, Section 6.1.2 states that edge treatments shall also be addressed as part of the avoidance and minimization process for areas not to be included in the MSHCP Conservation Area. Guidelines for such edge treatments are presented in the MSHCP as the Urban/Wildland Interface Guidelines (UWIG). Therefore, the UWIG applies to the avoided riparian/riverine habitat located in the northeastern corner of SMP 139 (i.e., northeast of the planned impact areas for SMP 139R1), even though it may not be part of the MSHCP Conservation Area.

A portion of the Project site (SMP 139 R1) would occur adjacent to habitats to be avoided, including riparian habitats. As such, the proposed Project has the potential to result in temporary indirect impacts, as well as long-term indirect impacts, including impacts associated with the following: drainage; toxics; lighting; noise; invasives; barriers; and grading/land development. Each of these potential impacts is discussed below.

- Drainage. Planned impact areas associated with the Project would occur adjacent to riparian/riverine habitat located within MSHCP Criteria Cell #3348. Although the Project would not result in any direct impacts to this riparian/riverine area, Project runoff has the potential to indirectly impact the riparian/riverine habitat with runoff from the Project site. However, the proposed Project would be required to comply with the Project's Water Quality Management Plan (WQMP) (MND Appendix F2), which incorporates Best Management Practices (BMPs) that are intended to preclude the release of polluted runoff from the site. Moreover, the Project also would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit, which requires the Project applicant to implement a Storm Water Pollution Prevention Plan (SWPPP) during future mining activities. Implementation of a SWPPP would further ensure that Project runoff does not contain pollutants that would impact off-site drainages or riparian areas. Accordingly, the proposed Project would not result in a significant indirect impact due to drainage, and mandatory adherence to the WQMP and NPDES requirements would ensure the Project does not conflict with MSHCP Section 6.1.4.

- Toxics. Although not anticipated, the proposed Project has the potential to generate chemicals or other potentially toxic materials (e.g., diesel fuel) with the potential to impact off-site lands within MSHCP Criteria Cell #3348. However, the proposed Project includes a WQMP that incorporates BMPs that have been designed to ensure that Project-related runoff does not adversely impact water quality. During Project implementation, a SWPPP also would be required to implement the BMPs specified in the Project's SWMP. With mandatory compliance to the Project's WQMP and future SWPPP, a significant impact due to toxics would not occur; therefore, the Project would not conflict with MSHCP Section 6.1.4.

- Lighting. Project operations may involve the use of lighting during nighttime hours, which has the potential to indirectly impact off-site lands located within MSHCP Criteria Cell #3348. This is evaluated as a potentially significant direct impact and a potential conflict with MSHCP Section 6.1.4 for which mitigation would be required.

- Noise. Project operations have the potential to generate noise, and such noise could adversely affect preserved resources within the MSHCP Conservation Area. In the case of the proposed Project, Project-related noise has the potential to indirectly impact the off-site MSHCP riparian/riverine resources located immediately adjacent to the northeastern corner of the Project's impact area. Based on the information provided in the Project's Noise Impact Analysis (MND Appendix G), Project operations (including crushing equipment, dump trucks, and loaders) would generate approximately 86 dB at a distance of 50 feet from the source (which, for purposes of analysis is assumed to be the rock crusher location). Sound diminishes at a rate of 6 dB per doubling of distance. Therefore, if the rock crusher were to be located within approximately 600 feet of the off-site riparian/riverine habitat, then the Project would impact the off-site riparian/riverine habitat, resulting in a conflict with MSHCP Section 6.1.4. This is evaluated as a significant impact for which mitigation would be required.

- Invasives. Projects that are adjacent to the MSHCP Conservation Area are required to avoid the use of invasive plant species in landscaping, including invasive, non-native plant species listed in *Volume I*, Table 6-2 of the MSHCP. However, plant species proposed as part of the Project's Reclamation Plan are listed in Table 3-2, *Reclamation Seed Mix*, of the Project's MND. None of the plant species included in the Reclamation Plan's seed mix is considered invasive plant species, and none is listed in Table 6-2 of the MSHCP. Therefore, the proposed Project would not result in the introduction of invasive plant species adjacent to the MSHCP Conservation Area, and a significant impact due to a conflict with MSHCP Section 6.1.4 would not occur.

- Barriers. The MSHCP requires proposed land uses adjacent to the MSHCP Conservation Area to incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. The proposed Project would incorporate fencing surrounding the SMP 139R1 site, and a gated access also is planned for the intersection of Maitri Road and Temescal Canyon Road. Therefore, the proposed Project would be consistent with the MSHCP requirements for barriers, and a significant impact due to a conflict with MSHCP Section 6.1.4 would not occur.

- Grading/Land Development. The MSHCP states that manufactured slopes associated with development shall not extend into the MSHCP Conservation Area. The proposed Project site does not extend to the existing Conservation Area. Although direct impacts from Project grading would occur on-site and within MSHCP Criteria Cell #3348, such effects are addressed separately as Project direct impacts and are not subject to MSHCP Section 6.1.4. As such, the grading/land development standards of MSHCP Section 6.1.4 do not apply to the proposed Project and a significant impact due to a conflict with MSHCP Section 6.1.4 would not occur.

Project Compliance with MSHCP Section 6.3.2

MSHCP Section 6.3.2 requires special surveys for certain plant species for lands located within the Criteria Area Plant Species Survey Areas (CAPSSA). MSHCP Section 6.3.2 also identifies lands requiring surveys for certain animal species (burrowing owl, mammals, amphibians).

No portion of the proposed Project site or off-site impact areas occur within the MSHCP survey areas for the western burrowing owl, mammals, or amphibians. Therefore, the MSHCP Section 6.3.2 provisions related to focused surveys for animal species are not applicable to the proposed Project.

As shown on Figure EA-1, only the northeastern portion of the Project site is located within the CAPSSA. Therefore, there would be no conflict with the CAPSSA within the off-site impact areas. Areas located within the on-site portion of the CAPSSA have been subject to regular disturbance as a result of the active mining activities, and therefore contain a lack of suitable habitat for special-status plants. Therefore, proposed impacts on-site would not result in any impacts to the following CAPSSA species, and focused surveys for these species would not be required pursuant to MSHCP Section 6.3.2: thread-leaved brodiaea (*Brodiaea filifolia*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), Parish's brittlescale (*Atriplex parishii*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), round-leaved filaree (*California macrophylla*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), and little mousetail (*Myosurus minimus* ssp. *apus*).

Based on the analysis provided above, the proposed Project would not conflict with MSHCP Section 6.3.2.

b & c) Mining activities associated with the proposed Project have the potential to directly or indirectly impact endangered or threatened plant and animal species, if such species occur within areas planned for impact by the Project.

Impacts to Listed Plant Species

According to the Project's biologist (Glen Lukos Associates), due to the highly disturbed nature of the proposed Project site and the portions of the off-site impact areas located within existing mining areas (i.e., SMPs 143, 150, 182, and 202), no listed plant species are expected to occur in these areas. Listed plant species also are not anticipated to occur within the existing roadway alignments for Maitri Road or the east-west access road due to the disturbed nature of these areas. However, and as discussed under Issue 7.a) above, the southwestern portion of the off-site impact area (i.e., southwesterly of the existing office building) consists of relatively undisturbed habitat, which has at least a low to moderate potential to contain the following listed plant species: Hammitt's clay-cress, many-stemmed dudleya, Munz's onion, and San Miguel savory. Potential impacts to these listed plant species within the off-site impact areas are evaluated as a significant impact for which mitigation would be required.

In addition, Project impacts to non-listed plant species in the southwestern portion of the off-site impact areas (i.e., southwesterly of the existing office building) also would be considered directly and cumulatively significant because future impacts to this area could result in the loss of habitat for special status plant species.

Impacts to Listed Animal Species

Due to the lack of suitable habitat, no listed animal species are expected to occur within the proposed Project site or off-site impact areas. Therefore, a significant impact to listed animal species would not occur as a result of Project activities.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As previously summarized in MND Section 2.4.2, and based on the findings of Chang Consultants (Technical Appendix K), historically drainage from the Project site (including upstream tributaries) largely sheet flowed across the Project site. During most years, including during the 2- and 25-year storm events, these flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). As part of the mining activities that commenced in the 1970s, drainage from the Mayhew Creek was diverted around the SMP 139 mining areas via a man-made earthen channel, which resulted in an increase in flows from the Project site as compared to historic (natural) conditions.

In January/February 2005, heavy rains, combined with geological movement along the Glen Ivy Fault line, caused the bank between the Mayhew Creek and the SMP 139 pit wall to substantially erode and partially collapse into the SMP 139 mining pit. As a result, flows from Mayhew Creek began to discharge immediately into the SMP 139 gravel pit and created instability issues with respect to the southern slopes of the mining pit. In order to address this emergency condition, in early 2005 the mining operator constructed a concrete down-drain structure measuring approximately 300 feet in length along the southern pit wall of the SMP 139 site. The intent of this down-drain structure was to stabilize the southern pit wall against water erosion hazards. With completion of the down-drain structure, flows from the Mayhew Creek were fully detained within the SMP 139 pit and no longer were conveyed downstream to the Temescal Wash (even during 50- and 100-year storm events).

Construction of the down-drain structure resulted in a measurable decrease in the amount of flows leaving the site, as compared to the conditions that occurred following commencement of mining operations (when flows from Mayhew Creek were diverted around the mining areas via a man-made earthen channel). However, when compared to the historic (natural) drainage conditions of the site, the construction of the down-drain structure did not result in a change in the amount of flows reaching downstream tributaries during most years (including years during which the 2- and 25-year storm events occurred). As compared to historical (natural) conditions, construction of the down-drain structure (and diversion of most of the Mayhew Creek flows into the SMP 139 pit) only reduced the amount of flows reaching downstream tributaries (including Temescal Creek) during 50- and 100-year storm events, with a 1 to 2 percent chance of occurrence in a given year.

Thus, although the construction of the down-drain structure redirected flows from Mayhew Creek into the SMP 139 mining pit, the reduction in flows did not have adverse effects on endangered or threatened plant or animal species that rely on habitat associated with downstream tributaries (including Temescal Creek). This is because under historic (natural) conditions, flows from the site rarely reached any downstream tributaries, and therefore historic (natural) flows from the Project site did not substantially contribute to any habitat areas located within downstream habitat areas.

d) Within the on-site areas and the portions of the off-site impact areas located within existing mining permits and/or roadway alignments, the proposed Project would remove low quality habitat for wildlife that has been subject to a high level of disturbance. Impacts within these areas would not restrict the local movement of wildlife within or through the site. Furthermore, since these areas do not occur within a designated MSHCP Linkage or Constrained Linkage, the area is not critical for regional wildlife movement as recognized by the MSHCP. As such, impacts to wildlife movement would be less than significant.

The portions of the off-site impact areas that are not within existing mining permits or roadway alignments contain higher quality habitat and impacts to these areas would displace or restrict the local movement of wildlife within or through that portion of the off-site impact areas. However, since these areas do not occur within a designated MSHCP Linkage or Constrained Linkage, these areas are not critical for regional wildlife movement as recognized by the MSHCP. As such, impacts to wildlife movement would be less than significant.

e & f) Table EA-3, *Impacts to Vegetation Communities*, provides a summary of the proposed Project's impacts to natural vegetation communities, including riparian communities. As shown, impacts within the proposed Project site and off-site impact areas would include impacts to 248.93

acres of vegetation communities, including 15.32 acres of native upland scrub communities and 1.16 acres of riparian communities. A discussion of Project impacts to each of the vegetation communities located on-site and within the off-site impact areas is provided below:

- Mulefat Scrub: The Project would result in direct permanent impacts to approximately 0.43 acre of disturbed mulefat scrub. The area of mulefat scrub to be affected occurs off-site in the northern portion of the off-site impact area (within SMP 202) and is not associated with a riparian/riverine feature. As such, and assuming mandatory payment of MSHCP mitigation fees, impacts to 0.43 acre of mulefat scrub would be considered less than significant.

- Riversidean Sage Scrub: The Project would result in direct permanent impacts to approximately 10.40 acres of Riversidean sage scrub (RSS), comprised of approximately 4.86 acres of disturbed RSS that occurs on-site and 5.54 acres of disturbed RSS in off-site impact areas. Areas of RSS to be affected typically occur along the perimeter of current mining operations. RSS is addressed through the MSHCP, and the Project site is not identified for conservation by the MSHCP. Accordingly and based upon the mandatory payment of MSHCP mitigation fees, impacts to RSS both on- and off-site would be considered less than significant.

- Disturbed Alluvial Scrub: Approximately 0.78-acre of disturbed alluvial scrub located in the northern edge of the Project site would be impacted by future mining activities. Alluvial scrub is addressed as part of the MSHCP and the Project site is not identified for conservation by the MSHCP. Accordingly and based upon the mandatory payment of MSHCP mitigation fees, impacts to 0.78-acre of disturbed alluvial scrub would be considered less than significant.

Table EA-3 Impacts to Vegetation Communities

Vegetation Community	On-Site Impact Acres	Off-Site Impact Areas	Total Impacts
Scrub Communities			
Disturbed Alluvial Scrub	0.78	0.00	0.78
Riversidean Sage Scrub (RSS)/Disturbed RSS	4.86	5.54	10.40
Chaparral/Disturbed Chaparral	0.29	1.99	2.28
Coast Live Oak Woodland	0.00	1.43	1.43
Disturbed Mulefat Scrub	0.00	0.43	0.43
Scrub Communities Subtotal:	**5.93**	**9.39**	**15.32**
Riparian Communities			
Southern Willow Scrub	1.16	0.00	1.16
Riparian Communities Subtotal:	**1.16**	**0.00**	**1.16**
Disturbed Communities			
Disturbed/Developed	164.18	42.09	206.27
Residential/Urban/Exotic	0.22	4.29	4.51
Aggregate Desilting Basin	15.34	6.33	21.67
Disturbed Communities Subtotal:	**179.74**	**52.71**	**232.42**
TOTAL:	**186.83**	**62.10**	**248.93**

- Chaparral/Disturbed Chaparral: The Project would result in direct permanent impacts to 2.28 acres of chaparral and disturbed chaparral scrub. The chaparral communities to be affected occur at the south and southwestern portions of the off-site impact areas (1.99 acres), with a small area (0.29 acre) occurring in the southernmost portion of the Project site. Chaparral is

addressed through the MSHCP and the Project site is not identified for conservation by the MSHCP. Based upon the mandatory payment of MSHCP mitigation fees and incorporation of the mitigation measures required to address the portion of the chaparral located within the NEPSSA (refer to Issue 7.a)), impacts to 2.28 acres of chaparral/disturbed chaparral would be less than significant.

- Coast Live Oak Woodland: The Project would result in direct permanent impacts to 1.43 acres of coast live oak woodland, all of which would be located off-site. Coast Live Oak Woodland is addressed through the MSHCP and the Project site is not identified for conservation by the MSHCP. Assuming mandatory payment of MSHCP mitigation fees and incorporation of the mitigation measures required to address the portion of the chaparral located within the NEPSSA (refer to Issue 7.a)), impacts to 1.43 acres of Coast Live Oak Woodland would be less than significant.

- Residential/Urban/Exotic: The Project would result in direct permanent impacts to 4.51 acres of residential/urban/exotic vegetation communities. The residential/urban/exotic community does not contain habitat suitable for NEPSSA target species. Therefore, impacts to 4.51 acres of residential/urban/exotic vegetation communities would not be significant.

- Disturbed/Developed: Approximately 206.27 acres of disturbed/developed areas would be impacted both on- and off-site. However, as this habitat type is not considered significant, such impacts would not be significant.

- Aggregate Desilting Basin: The Project would result in direct permanent impacts to areas currently utilized as aggregate desilting basins associated with current mine operations, including approximately 15.34 acres located on-site and 6.33 acres located in the off-site impact areas. The aggregate desilting basins are a man-made feature and are therefore not considered to comprise significant biological habitat. Accordingly, Project impacts to aggregate desilting basins would not be significant.

As indicated in the above analysis, assuming mandatory payment of MSHCP mitigation fees and incorporation of the mitigation measures required to address habitat located within the NEPSSA (refer to Issue 7.a)), the proposed Project would result in a less than significant impact to riparian habitat and other sensitive natural communities. In addition, the proposed Project site and off-site impact areas do not encompass any areas containing federally protected wetlands; as such, no impact to wetlands would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As indicated under the discussion of historical drainage conditions under Issues 7.b) and c), construction of the down-drain structure did not result in a substantial change in the amount of runoff leaving the site as compared to historic (natural) conditions. Under historical (natural) conditions,

virtually all of the runoff traversing the Project site infiltrated into the groundwater table, including all on-site runoff during the 2- and 25-year storm events. Flows only were conveyed from the site to downstream tributaries (including Temescal Creek) during 50- and 100-year storm events, which have a 1 to 2 percent chance of occurrence during any given year.

Accordingly, construction of the down-drain structure in 2005 did not substantially affect any flows reaching downstream tributaries (including Temescal Creek), and therefore did not affect any riparian habitat or other sensitive natural communities located downstream from the Project site. Furthermore, as concluded by the ACOE (refer to Appendix J), Mayhew Creek does not discharge into a water of the United States or adjacent wetland, and is therefore not subject to regulation under Section 404 of the Clean Water Act. Thus, construction of the down-drain structure also did not result in a substantial adverse effect on federally protected wetlands.

g) Aside from the MSHCP (which is addressed above under Issue 7.a), the only local policy/ordinance protecting biological resources within the Project area is the In the Riverside County Oak Tree Management Guidelines, which requires surveys of individual trees and the minimization and/or avoidance of oak trees, where feasible. In order to demonstrate compliance with the County's Oak Tree Management Guidelines, a site-specific Oak Tree Survey was conducted for the Project site and off-site impact areas, the results of which are documented in Appendix D2 and summarized below.

Based on the results of the Oak Tree Survey, it was determined that a single species of oak tree (coast live-oak, *Quercus agrifolia*) occurs within the Project site and off-site improvement areas. A total of 46 coast live-oak trees were identified within the on- and off-site impact areas, none of which appeared to be dead or dying. However, several trees were noted as having broken or cut trunks/limbs. Of the 46 trees, 25 trees exhibited a single trunk, 13 exhibited two trunks, and eight exhibited more than two trunks. Figure EA-3, *Oak Tree Inventory Map*, provides a map depicting the location of each tree surveyed, and indicates whether the trees are located within the on-site or off-site portions of the Project site. Table EA-4, *Summary of On- and Off-Site Oak Trees*, provides a list of each tree, including the number of trunks, DBH, and a description of understory and other relevant comments.

One coast-live oak tree (#41) occurs within the on-site impact footprint. Two other oak trees (#45 and 46), occur immediately adjacent to the on-site areas (i.e., off-site), and are expected to be impacted by the Project. Tree #45 occurs immediately south of the impact boundary surrounded by a paved access area. Tree #46 occurs on the west side of Maitri Road opposite the impact boundary. These trees all occur individually and do not have native understory associated with them. The trees are not considered "oak woodlands." The trees have also been subjected to varying degrees of past disturbance. The loss of these trees would not be considered significant, and would not require mitigation. Thus, there would be no impacts to oak trees subject to the Oak Tree Management Guidelines associated with the on-site portions of SMP 139R1.

The remaining oak trees occur within the Project's off-site impact areas, which may or may not be avoided as part of impacts anticipated in association with future revisions to SMPs 143, 150, 182, and/or 202. The precise nature of impacts would be defined as part of the revisions to these off-site mining permits, and would require future discretionary review and approval by Riverside County. Trees #36-40 are located on the northeast side of the MAMR offices, and are not associated with the oak woodlands located west and south of the office building. Tree #36 and #37 occur within a

Legend

- Onsite Area
- Offsite Area
- Coast Live Oak Tree

Source: Glenn Lukos Associates

T&B PLANNING, INC.

Figure EA-3

OAK TREE INVENTORY MAP

Table EA-4 Summary of On- and Off-Site Oak Trees

Tree Number	Number of Trunks	DBH (Inches)	Understory / Comments	Tree Number	Number of Trunks	DBH (Inches)	Understory / Comments
1	1	59	Leaf litter	24	1	25	*Opuntia*
2	1	30	Leaf litter	25	2	22, 18	*Opuntia*
3	1	41	Oak saplings, NNG, chaparral, poison oak.	26	6	22, 21, 21, 21, 21, 17	Leaf litter. Adjacent to office.
4	1	48	NNG. Adjacent to office complex.	27	2	24, 22	Leaf litter. Adjacent to office.
5	1	59	NNG. Adjacent to office complex.	28	1	3	Chaparral
6	1	34	NNG. Adjacent to office complex.	29	2	29, 16	Leaf litter
7	2	30, 22	NNG. Adjacent to office complex.	30	1	25	Leaf litter
8	3	9, 9, 4	Oak saplings, chaparral.	31	1	18	Leaf litter
9	2	16, 9	Oak saplings, chaparral.	32	3	22, 18, 16	Leaf litter. One broken trunk.
10	1	10	Oak saplings, chaparral.	33	1	19	NNG
11	2	43, 19	Leaf litter. Overhangs office building.	34	6	29, 28, 28, 27, 25, 18	NNG, *R. ilicifolia*
12	3	10, 6, 2	Oak saplings, poison oak, toyon.	35	1	22	Chaparral
13	2	10, 4	Oak saplings, toyon.	36	1	41	Disturbed. Adjacent to mine.
14	5	7, 6, 5, 5, 4	Leaf litter.	37	1	56	Disturbed. Adjacent to parking lot/mine.
15	1	28	Oak saplings, poison oak.	38	1	32	Adjacent to parking lot/office.
16	1	19	Oak saplings, poison oak.	39	2	25, 14	Adjacent to office.
17	1	5	Oak saplings, chaparral	40	1	34	Adjacent to office.
18	4	28, 16, 19, 18	Oak saplings, chaparral	41	5	20, 18, 18, 16, 13	NNG. Adjacent to mine.
19	2	5, 5	Oak saplings, chaparral	42	2	21, 16	Inside mine fence. Not tagged. DBH estimated.
20	2	22, 8	Oak saplings, chaparral	43	1	23	Inside mine fence. Not tagged. DBH estimated.
21	2	7, 5	Oak saplings, *Opuntia*	44	1	35	Inside mine fence. Not tagged. DBH estimated.
22	1	18	Oak saplings, chaparral	45	1	34	Within raised concrete block planter surrounded by mine footprint. Many cut limbs.
23	2	11, 5	Oak saplings, poison oak.	46	1	32	Between Maitri Road and mine.

disturbed area on the opposite side of the parking lot from the MAMR offices. Trees #38-40 occur immediately adjacent to the office building on the northeast side. None of these trees are considered oak woodland, and the loss of these trees would not be considered significant.

Of the remaining trees, all are located within the off-site areas and are considered to be part of broader oak woodland habitat. Trees #42-44 occur within an off-site mine boundary and have a potential to be impacted in the future. Trees #4-7 are clustered on the northwest side of the existing office building, between the parking lot and a mine facility. These trees may also have a potential to be impacted in the future. All other oak trees occur west and south of the existing office building, and are associated with contiguous oak woodland habitat adjacent to and overlapping with chaparral habitat. Although these trees may be avoided in the future, mitigation is provided below in the event that unavoidable impacts occur to all or portions of the oak woodland habitat. The loss of these trees would be considered potentially significant, and would require mitigation consisting of tree relocation and/or replacement as part of the County's future discretionary review process for revisions to SMPs 143, 150, 182, and/or 202.

Mitigation:

M-BI-1 Prior to approval of any revisions to Surface Mining Permit 182 allowing for mining activities within the relatively undisturbed habitat located southwesterly of the existing office building (and westerly of existing approved Surface Mining Permit 182), off-site of the Project site, focused surveys shall be conducted to determine whether special status plant species occur within this area. This area comprises approximately 9.1 acres and includes 1.84 acres of chaparral, 1.14 acres of Riversidean sage scrub, 1.65 acres of Riversidean sage scrub/chaparral ecotone, and 1.92 acres of coast live oak woodland habitats. Non-covered plant species with at least a low to moderate potential to occur in this area, and that shall be evaluated as part of future focused surveys, include Hammitt's clay-cress (*Sibaropsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), Munz's onion (*Allium munzii*), and San Miguel savory (*Satureja chandleri*). If one or more of these species is identified within the area located southwesterly of the existing office building, and in the event that avoidance is not possible, then a Determination of Biologically Equivalent or Superior Preservation (DBESP) shall be prepared as described below. The preparation of a detailed habitat restoration plan for the impacted habitat also shall be prepared once the type and quantity of the non-covered species impacts are known, so appropriate restoration or translocation options can be discussed.

If any Narrow Endemic Plant Species populations are identified as part of the survey, then the provisions of MSHCP Section 6.1.3 shall apply, including the requirement to avoid impacts to 90% of those portions of the property that provide for long-term conservation value of the identified Narrow Endemic Plant Species until it is demonstrated that conservation goals for the particular species are met. If such avoidance is not feasible, then a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report shall be prepared and approved by the Riverside County Environmental Programs Department (EPD). The DBESP also shall be subject to review by the Wildlife Agencies. The DBESP shall be prepared in accordance with the requirements and criteria set forth in MSHCP Section 6.1.2, which requires the Project applicant to demonstrate that although the proposed project would exceed the 10% Narrow Endemic Plant Species impact threshold, with proposed design and compensation measures, it would result in an overall MSHCP Conservation Area design and configuration biologically equivalent or superior to that which would occur under a project alternative within the impact threshold without these measures.

No permits which authorize impacts to the approximately 9.1-acre area located southwest of the existing office building, located off-site of the Project site, shall be issued unless either the focused surveys determine that no non-covered plant species occur, 90% of the habitat is avoided through design, or a DBESP is approved by EPD.

M-BI-2 (Condition of Approval 10.Planning.41) Project lighting shall be shielded and directed away from the off-site areas abutting the northeastern corner of the proposed Project site.

M-BI-3 (Condition of Approval 10.Planning.42) All proposed rock crushers shall be set back a minimum distance of 600 feet from the off-site riparian/riverine habitat located adjacent to the northeastern corner of the proposed Project site. In the event that rock crushers are proposed within 600 feet of the off-site riparian/riverine habitat, then a focused noise study shall be prepared to identify measures that need to be undertaken to reduce Project-generated noise levels affecting the off-site riparian/riverine habitat to less than 65 dBA CNEL.

M-BI-4 Prior to approval of any future revisions to Surface Mining Permits (SMPs) 143, 150, 182, and/or 202, the Riverside County Environmental Programs Department shall assure that mitigation measures have been incorporated into the conditions of approval for the appropriate permit(s) to address any proposed impacts to oak trees requiring mitigation pursuant to the Riverside County Oak Tree Management Guidelines, as approved by the Riverside County Board of Supervisors on March 2, 1993. A summary of the trees requiring mitigation located within the off-site impact areas for the SMP 139R1 Project, along with the required mitigation ratios for each individual tree, are provided below in Table EA-5, *Oak Tree Mitigation Requirements*, while Figure EA-3 depicts the location of each individual oak tree.

Monitoring:

M-BI-1 Prior to the issuance of any future mining permits affecting the portions of the off-site impact areas located within the NEPSSA (i.e., areas located southwesterly of the existing office complex), the Project applicant shall be required to conduct the MSHCP-required narrow endemic plant surveys. The Riverside County Planning Department and the Environmental Programs Department shall review focused surveys to ensure compliance with the MSHCP for any narrow endemic plant species found within the off-site NEPSSA survey areas. The applicant for these future off-site mining permit revisions shall comply with all applicable provisions of the MSHCP.

M-BI-2 Project lighting restrictions shall be the responsibility of the Project applicant, and verified by Riverside County as part of the annual reports required for SMP 139R1. Project lighting restrictions shall be made a condition of SMP 139R1 and shall be enforced throughout the duration of activities conducted pursuant to SMP 139R1.

M-BI-3 Siting restrictions for on-site rock crushers shall be the responsibility of the Project applicant, and verified by Riverside County as part of the annual reports required for SMP 139R1. In the event the rock crusher is proposed within 600 feet of the off-site riparian habitat, then the Project applicant shall be responsible for preparing a site-specific noise study and for implementing any noise attenuation measures specified

therein. In the latter case, the Planning Department shall be responsible for reviewing the future noise study, and Riverside County shall monitor compliance with any required noise attenuation measures as part of the annual reports required for SMP 139R1. These requirements shall be enforced throughout the duration of activities conducted pursuant to SMP 139R1.

Table EA-5 Oak Tree Mitigation Requirements

Tree Number	DBH (Inches)	Replacement Ratio	Tree Number	DBH (Inches)	Replacement Ratio
1	59	8:1	20	22, 8	5:1
2	30	5:1	21	7, 5	3:1
3	41	7:1	22	18	4:1
4	48	7:1	23	11, 5	4:1
5	59	8:1	24	25	5:1
6	34	6:1	25	22, 18	5:1
7	30, 22	6:1	26	22, 21, 21, 21, 21, 17	5:1
8	9, 9, 4	3:1	27	24, 22	5:1
9	16, 9	4:1	28	3	3:1
10	10	3:1	29	29, 16	5:1
11	43, 19	7:1	30	25	5:1
12	10, 6, 2	3:1	31	18	4:1
13	10, 4	3:1	32	22, 18, 16	5:1
14	7, 6, 5, 5, 4	3:1	33	19	5:1
15	28	5:1	34	29, 28, 28, 27, 25, 18	5:1
16	19	4:1	35	22	5:1
17	5	3:1	42	21, 16	5:1
18	28, 16, 19, 18	5:1	43	23	5:1
19	5, 5	3:1	44	35	6:1

M-BI-4 The Riverside County Planning Department shall ensure that conditions of approval requiring mitigation for impacts to oak trees subject to the Oak Tree Management Guidelines are identified prior to approval of any revisions to SMPs 143, 150, 182, and/or 202. No disturbance to trees subject to the Oak Tree Management Guidelines shall occur until the required mitigation has been implemented.

CULTURAL RESOURCES Would the project				
8. Historic Resources a) Alter or destroy an historic site?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	☐	☐	☐	☒

Source: County Staff Discussion with County Archaeologist (March 2011).

Findings of Fact:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

a & b) The Project site and off-site impact areas have been disturbed over the past 35 +/- years and do not contain any historic sites or historical resources as defined in California Code of Regulations, Section 15063.5. Accordingly, there would be no impact to historic resources as a result of the proposed Project.

Mitigation: No mitigation is required

Monitoring: No monitoring is required.

9. Archaeological Resources a) Alter or destroy an archaeological site.	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

Source: County Staff Discussion with County Archaeologist (March 2011); General Plan EIR, Figure 4.7-1 (Archaeological Sensitivity Areas).

Findings of Fact:

a & b) The proposed Project site and off-site impact areas have been disturbed over the past 35 +/- years, and no archaeological resources have previously been identified during such disturbance. Grading also was previously conducted along Maitri Road, the east-west oriented access roadway located at the southern boundary of the Project site, and within the on- and off-site setback areas, indicating there is no potential for uncovering archaeological resources in these areas. In addition, and according to General Plan EIR Figure 4.7-1, the proposed Project site and off-site impact areas are not identified within an area containing sensitive archaeological resources. Accordingly, implementation of the proposed Project would not result in any adverse impacts to any archaeological sites, nor would it cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5.

c) The potential exists that human remains may be unearthed during grading and excavation activities associated with future mining activities. However, in the event that human remains are discovered during ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. Mandatory compliance with these provisions of California state law would ensure that impacts to human remains, if unearthed during future mining activities, are appropriately treated, thereby reducing potential impacts to a level below significance.

d) There are no religious or sacred uses occurring within the proposed Project site or off-site impact areas. The Project area has largely been disturbed by on-going mining activities for approximately 35 years. Accordingly, no impact to religious or sacred uses would occur.

Mitigation: No mitigation is required

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Monitoring: No monitoring is required.				
10. Paleontological Resources a) Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?	☐	☐	☐	☒

Source: General Plan, Figure OS-8 (Paleontological Sensitivity)

Findings of Fact: According to Riverside County General Plan Figure OS-8, the proposed Project site and off-site impact areas are located within an area determined to have a "Low" potential for uncovering paleontological resources. In addition, due to past disturbance associated with mining activities over the past 35+/- years, there are no unique geologic features within the proposed Project site or off-site impact areas. Accordingly, the proposed Project would not directly or indirectly destroy a unique paleontological resources, site, or unique geologic feature, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

GEOLOGY AND SOILS Would the project				
11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☒	☐	☐
b) Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☒	☒	☐

Source: General Plan, Figure S-2 (Earthquake Fault Study Zones); GIS database; *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011.

Findings of Fact:

a & b) Two faults are associated with the Project site and off-site impact areas. The North Glen Ivy fault, which is considered to be an active branch within the Elsinore fault zone, crosses along the northeast corner and along the eastern portion of the north wall of the existing Mayhew Aggregates and Mine Reclamation (SMP 139) pit (Project site), and continues to the north of the SMP 202 and 133 pits, which are located off-site and to the northwest of the SMP 139 pit. The North Glen Ivy fault is right-lateral, strike slip fault. As observed on the proposed Project site, the North Glen Ivy fault zone appears to be between 10 and 20 feet in width where it is exposed. The on-site fault zone is characterized by pulverized and powdered rock material within the zone, surrounded by a narrow zone of highly folded and distorted sedimentary materials.

Another active branch of the Elsinore fault system, the South Glen Ivy fault, occurs offsite toward the southwest, while the Chino-Central Avenue fault occurs approximately 11.7 kilometers to the northwest of the proposed Project site. To the southeast, the Elsinore fault (Temecula Segment) passes within approximately 17.2 kilometers of the subject site. The Whittier fault passes within approximately 18.5 kilometers to the north-northwest of the site. To the north-northeast and

northeast, the San Jacinto fault (San Bernardino and San Jacinto Valley Segments) pass within approximately 35.9 and 36.4 kilometers, respectively, of the site. The San Andreas fault (San Bernardino Segment) passes within approximately 51.7 kilometers to the northeast of the site.

Surface rupture and ground shaking are judged to be the primary hazards most likely to affect the Project site and off-site impact areas, based upon proximity to seven (7) active faults. The proposed Project does not involve the construction of any new structures, as the Project only would involve an extension of time for an existing mining permit, an increase in areas and annual tonnage permitted for mining activities, and the operation of an IDEFO operation. Therefore, the primary risk of exposing people to substantial adverse effects associated with seismic activities or the rupture of a known fault would occur in association with modifying existing, slopes and creating future slopes as a result of proposed SMP 139R1.

To address potential safety hazards associated with the on-site slopes, a site-specific report, entitled, "Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation" (Hilltop Geotechnical, Inc., September 14, 2011) was prepared that includes recommendations to ensure slope stability and attenuate adverse conditions that may be presented by seismic events in the local or regional area. All recommendations contained within the site-specific Slope Stability Evaluation shall be enforced by Riverside County through conditions of approval imposed on SMP 139R1. In order to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Mandatory compliance with the recommendations contained within the Slope Stability Evaluation report (as would be required by Mitigation Measure M-GS-1) would ensure that the Project does not expose persons to potential substantial adverse effects associated with seismic activity or the rupture of a known fault. Nonetheless, impacts associated with Alquist-Priolo Earthquake Fault Zone and County Fault Hazard Zones would be potentially significant in the absence of mitigation.

Mitigation:

M-GS-1 (Condition of Approval 10.Planning.4) The following requirements of the Project's Slope Stability Evaluation (Appendix E) shall apply:

- As shown on the Project's Reclamation Plan (Figure 3-2 and Figure 3-3) mining slopes along the eastern edge of SMP 139R1 shall be constructed by flattening the cut mining slope to an inclination of 1.3H:1V (Horizontal to Vertical) or flatter, by reducing the height of the mining slope to a maximum height of 150 vertical feet or less, or by providing a horizontal offset from the property line of 170 feet or greater to the top of the mining slope. Combinations of a couple of the modifications will also provide the minimum factor of safety, and, if proposed, shall be evaluated by a qualified geotechnical consultant and subject to review by Riverside County.

- To reduce long term erosion hazards associated with reclamation slopes, the following recommendations for slope protection and maintenance shall be considered and/or incorporated when planning, designing, and implementing slope erosion methods:

  - Surface water should not be allowed to flow over the existing and/or proposed mining slopes other than incidental rainfall and irrigation. Alterations of manufactured or natural slopes, terraces, top of slope berms,

etc. that will prevent run-off from being expediently directed to approved disposal areas and away from the tops of slopes shall not be allowed.

- Surface drainage shall be positively maintained in a non-erosive manner.
- Top of slope berms shall be constructed and compacted as part of any grading of the property and should be maintained by the property owner. The drainage patterns shall be maintained throughout the life of the proposed development.
- Concentrated surface waters entering the property from off-site sources shall be collected and directed to a permanent drainage system and away from the top of mining slopes.
- The property owner is responsible for the maintenance and cleaning of the interceptor ditches, drainage terraces, down drains and other drainage devices that have been installed to promote slope stability.
- The property owner shall establish a program for the elimination of burrowing animals. This shall be an on-going program to protect slope stability.
- The property owner shall observe the drainage patterns during heavy precipitation periods as this is often when trouble occurs. Problems such as gullying or ponding shall be corrected as soon as practicable.
- High moisture content in slope earth materials is a major factor in slope erosion and slope failures. Therefore, precautions shall be taken to minimize earth material saturation.

Evidence of compliance with the above-listed recommendations from the Slope Stability Analysis shall be maintained on-site and made available for inspection by Riverside County upon request.

Monitoring:

M-GS-1 Riverside County shall ensure compliance with these requirements as part of annual reporting and inspections of the SMP 139R1 site.

12. Liquefaction Potential Zone a) Be subject to seismic-related ground failure, including liquefaction?	☐	☒	☐	☐

Source: General Plan, Figure S-3 (Generalized Liquefaction); Riverside County GIS; *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011..

Findings of Fact: Riverside County GIS shows proposed Project site and off-site impact areas having a "low" to "moderate" liquefaction potential. The proposed Project would not involve the construction of any new structures that could be adversely affected by seismic-related ground failure, including liquefaction. Moreover, the Project would be conditioned to comply with the recommendations contained within the Report of Slope Stability Evaluation report, which would ensure that on-site slopes are not subject to failure due to liquefaction hazards or seismic-related ground failure. In order

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Nonetheless, impacts due to seismic-related ground failure, including liquefaction, would be potentially significant in the absence of mitigation.

Mitigation: Mitigation Measure M-GS-1 shall apply.

Monitoring: Monitoring shall occur as specified above for Mitigation Measure M-GS-1.

13. Ground-shaking Zone Be subject to strong seismic ground shaking?	☐	☐	☒	☐

Source: General Plan, Figure S-4 (Earthquake-Induced Slope Instability Map); General Plan Figures S-12 through S-21 (showing General Ground Shaking Risk); *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011..

Findings of Fact: According to information contained in the Report of Slope Stability Evaluation, the proposed Project site and off-site impact areas have the potential to be exposed to strong seismic ground shaking due to proximity to seven (7) active faults. However, there are no new structures planned as part of the Project that would be detrimental to public health and safety in the event of a seismic event. Moreover, the Project would be conditioned to comply with the recommendations contained within the Report of Slope Stability Evaluation report, which would ensure that on-site slopes are not subject to failure during strong seismic ground shaking events. In order to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Nonetheless, impacts due to strong seismic ground shaking events would be potentially significant in the absence of compliance with the recommendations of the Slope Stability Evaluation.

Mitigation: Mitigation Measure M-GS-1 shall apply.
Monitoring: Monitoring shall occur as specified above for Mitigation Measure M-GS-1.

14. Landslide Risk a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?	☐	☒	☐	☐

Source: General Plan, Figure S-4 (Earthquake-Induced Slope Instability Map); *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011..

Findings of Fact: The Project site was evaluated for geologic hazards, including slope stability. Although the proposed Project site has the potential to result in on-site landslides during strong seismic events, the proposed Project would be conditioned to comply with the site-specific Report of Slope Stability Evaluation. All recommendations contained in the Report of Slope Stability Evaluation would be enforced as part of the Project's conditions of approval. According to the Report of Slope Stability Evaluation, adherence to the recommendations contained in the report would ensure that all slopes would have a factor of safety of 1.5 for static conditions and 1.1 for seismic conditions (refer to

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

the Report of Slope Stability Evaluation for additional information). In addition, and according to Riverside County General Plan Figure S-4, the proposed Project site is not located in an area with existing landslides, and is not considered susceptible to seismically induced landslides or rock slides. Hilltop Geotechnical also did not identify any hazards associated with lateral spreading. In order to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Accordingly, the proposed Project would be subject to adverse environmental effects associated with on- or off-site landslides, lateral spreading, collapse, and/or rockfall hazards in the absence of compliance with the recommendations of the site-specific Slope Stability Evaluation; this is evaluated as a significant impact for which mitigation would be required. Before off-site areas could be impacted, the County would review slope stability considerations in association with future revisions to the adjacent mining permits (SMPs 143, 150, 182, and 202), which would assure that the off-site impact areas are not subject to impacts associated with landslides, lateral spreading, collapse, or rockfall hazards.

Mitigation: Mitigation Measure M-GS-1 shall apply.

Monitoring: Monitoring shall occur as specified above for Mitigation Measure M-GS-1.

15. Ground Subsidence a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?	☐	☒	☐	☐

Source: General Plan, Figure S-7 (Documented Subsidence Areas); *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011..

Findings of Fact: Riverside County General Plan Figure S-7 indicates that the proposed Project site and off-site impact areas are "susceptible" to ground subsidence, although no areas of documented subsidence occurs in the Project area. The Project site and off-site impact areas are located within an alluvial fan, which is comprised of coarse-grained sands and gravels. No groundwater was encountered during investigation of the proposed Project site by Hilltop Engineering, which included the drilling of 8 borings on the property. The dense deposit of granular materials, combined with the lack of groundwater, indicates a low potential for ground subsidence. Moreover, the proposed Project shall be conditioned to comply with the site-specific Report of Slope Stability Evaluation, which would ensure that all existing and future slopes constructed on-site would not be subject to hazards associated with ground subsidence. In areas where it can be achieved, compaction shall be of a high enough standard to allow future development of the reclaimed property that is consistent with the land uses permitted on the site pursuant to the County's General Plan (redeveloped as opposed to open space). In order to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Prior to disturbance of any off-site areas, the County would review slope stability considerations in association with future revisions to the adjacent mining permits (SMPs 143, 150, 182, and 202), which would assure that the off-site impact areas are not subject to hazards associated with ground subsidence. Nonetheless, impacts due to ground subsidence would be potentially significant in the absence of mitigation.

Mitigation: Mitigation Measure M-GS-1 shall apply.

Monitoring: Monitoring shall occur as specified above for Mitigation Measure M-GS-1.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Other Geologic Hazards a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?	☐	☐	☐	☒

Source: On-site Inspection; Project Application Materials; General Plan, Figure S-10 (Dam Failure Inundation Zones).

Findings of Fact: The proposed Project site and off-site impact areas are not located within an area which has a known risk of seiche, mudflow, or volcanic activity. In addition, and according to Riverside County General Plan Figure S-10, the proposed Project site and off-site impact areas are not subject to inundation due to the failure of any nearby dams. Accordingly, no impact would occur as a result of seiches, mudflows, volcanic hazards, or other geologic hazards not already addressed above or below.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

17. Slopes a) Change topography or ground surface relief features?	☐	☐	☒	☐
b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?	☐	☒	☐	☐
c) Result in grading that affects or negates subsurface sewage disposal systems?	☐	☐	☐	☒

Source: Project Application Materials; *Report of Slope Stability Evaluation, Mayhew Aggregate and Mine Reclamation Aggregate Quarry*. Hilltop Geotechnical, Inc., September 14, 2011..

Findings of Fact:

a) The majority of the Project site and off-site impact areas were previously subject to changes in topography/ground relief as a result of mining activities over the past 35 +/- years. Under the currently approved PP 1828, SMP 139, and RCL 106, the existing on-site cut slopes would remain in their current condition in perpetuity, which includes slope angles of 1:1 (horizontal:vertical). Under these existing permits, the only improvements to these slopes would consist of hydroseeding as part of the final reclamation of the site. However, according to the Project's geologist (Hilltop Geotechnical), these slopes represent an unstable condition. Under the proposed Project, all cut slopes would be required to be constructed at a maximum gradient of 3:1, by reducing the maximum height of slopes to 150 vertical feet or less, or by providing a horizontal offset from the property line of 170 feet or greater to the top of the mining slope. Along the southern, western, and northern perimeter of the SMP 139 site, the required slope angles would be achieved through future mining activities as proposed by SMP 139R1. Along the eastern perimeter, the required slope angle would be achieved through operation of the IDEFO, which would provide fill materials to buttress the existing slope. It is anticipated that IDEFO materials would be prioritized in the southeastern corner of the existing pit in order to provide the necessary fill material to buttress the existing unstable slope. Thus, although the Project would change the site's existing topography or ground surface relief features, such changes are necessary to provide for slope stability along the SMP 139 perimeter. Additionally, such changes also would ensure that the existing unstable slopes are not retained in perpetuity, as would occur

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

under the existing approvals for the site. Although the proposed Project also would generally expand the areas subject to mining to include additional on-and off-site as necessary to excavate the existing perimeter slopes, mandatory compliance with the Project's Reclamation Plan and operation of the IDEFO would assure that, with exception of the manufactured slopes at the edges of the reclaimed areas, the final grades at the site post-reclamation generally would resemble topographic conditions that existed prior to the commencement of mining activities at the proposed Project site. Accordingly, impacts due to changes to the site's topography and ground surface relief features are evaluated as a less than significant impact.

b) The Project would result in an expansion of an existing excavated pit with maximum slope angles of 1.3:1 (Horizontal:Vertical) containing a 10 foot bench every 50 feet. Through the IDEFO and Reclamation Plan, the site would be backfilled and ultimately contain maximum slope angles of 3:1. Slopes would be revegetated as required in the Reclamation Plan. In addition, proposed slopes were evaluated as part of a site-specific Slope Stability Evaluation report, which determined that there would be no significant hazards associated with proposed slopes assuming compliance with the recommendations contained within the report. In order to ensure compliance with the recommendations of the site-specific Slope Stability Evaluation, Mitigation Measure M-GS-1 has been imposed on the Project. Accordingly, impacts due to the creation of slopes greater than 2:1 or higher than 10 feet in height as part of the mining operation would be potentially significant prior to mitigation.

c) There are no subsurface sewage disposal systems within the areas that would be permitted for physical disturbance as part of SMP 139R1. The only subsurface sewage facilities located on the Project site or within off-site impact areas are associated with a septic system that serves the existing administrative office building located off-site within SMP 182. No disturbance to the septic system would occur as a result of the proposed Project or as a reasonably foreseeable consequence of the proposed Project; therefore, no impact would occur.

Mitigation: No mitigation is required beyond mandatory compliance with the recommendations of the Slope Stability Evaluation, which would be enforced as part of the Project's conditions of approval.

Monitoring: Annual inspections will verify compliance with the Project's conditions of approval.

18. Soils				
a) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
b) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☐	☒
c) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Source: Project Application Materials; On-site Inspection; *Preliminary Hydrology Study & Drainage Analysis.* Joseph E. Bonadiman & Associates, Inc., August 2011; *Technical Memorandum, Hydrology & Hydraulics/WQMP for Updated SMP00139R1.* Joseph E. Bonadiman & Associates, Inc., December 5, 2012; *Project Specific Water Quality Management Plan.* Joseph S.C. Bonadiman & Associates, Inc., August 2011..

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

a) A site-specific hydrology study and water quality management plan (WQMP) were prepared for the proposed Project. As concluded in these reports, all tributary and runoff from the proposed Project site and off-site impact areas would be retained within the proposed Project site and/or off-site impact areas and would not discharge to downstream conveyances/receiving waters. Moreover, the Project shall be required to comply with the Best Management Practices (BMPs) identified in the site-specific WQMP, which would further preclude the potential for increased erosion. BMPs identified as part of the site-specific WQMP shall be enforced as conditions of approval by Riverside County. Therefore, the proposed Project has no potential to result in substantial soil erosion or the loss of topsoil, and less than significant impacts would occur.

b) No structures are proposed as part of the Project. Thus, there are no conditions proposed on-site or within the off-site impact areas that could result in substantial risks to life or property as a result of expansive soils. Expansive soils are only a risk when structures are built on top of soils, which may cause structural instability. Accordingly, no impact would occur.

c) No septic tanks or alternative waste water disposal systems are proposed to be constructed or expanded as part of the Project. Accordingly, no impact would occur.

Mitigation: No mitigation is required beyond mandatory compliance with the BMPs specified in the site-specific WQMP, which would be enforced as part of the Project's conditions of approval.

Monitoring: Annual inspections will verify compliance with the Project's conditions of approval.

19. Erosion a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?	☐	☐	☐	☒
b) Result in any increase in water erosion either on or off site?	☐	☐	☒	☐

Source: Project Application Materials; On-site Inspection; *Preliminary Hydrology Study & Drainage Analysis*. Joseph E. Bonadiman & Associates, Inc., August 2011; *Technical Memorandum, Hydrology & Hydraulics/WQMP for Updated SMP00139R1*. Joseph E. Bonadiman & Associates, Inc., December 5, 2012; *Project Specific Water Quality Management Plan*. Joseph S.C. Bonadiman & Associates, Inc., August 2011; *Mayhew Aggregates – Historic Storm Runoff*, Chang Consultants, June 13, 2013.

Findings of Fact:

a & b) A site-specific hydrology study and WQMP were prepared for the proposed Project. As concluded in these reports, all tributary and site runoff would be retained on the property and would not discharge to downstream conveyances/receiving waters. In addition, the existing riverine feature located along the eastern perimeter of the Project site would not be impacted as part of the Project. Although additional areas of the proposed Project site and off-site impact areas would be subject to new disturbances associated with mining activities, such disturbance would not result in an increase in water erosion hazards since all runoff would be retained on-site. Additionally, ultimate mining activities associated with SMP 139R1 would result in the relocation of the existing down-drain structure located in the southern portion of the site. As a result, the location at which the existing Mayhew Creek drainage is diverted into a detention basin would occur approximately 2,500 feet south

of the existing down-drain structure location. Relocation of the down-drain structure also cannot occur until SMP 150 is revised to identify the precise design for the relocated down-drain structure, to accommodate a detention basin of adequate size, and to allow for mining of the off-site portions of the slopes and setback areas between SMP 139R1 and SMP 150. The relocation of the down-drain structure would not change the deposition, siltation, or erosion in a way that would modify the channel of a river or stream or the bed of a lake, as all flows from Mayhew Creek would be detained on-site within the SMP 150 site (as currently occurs on the SMP 139 site). Relocation of the down-drain structure only will occur, if at all, after the issuance of all necessary approvals from all appropriate governmental agencies. In the event that SMP 150 is not revised to allow for the relocation of the down drain structure, then mining activities on-site (within SMP 139R1) would not be allowed to conduct mining activities that adversely affect the existing down drain structure (pursuant to the Project's Conditions of Approval to be imposed by Riverside County, and as described in MND Section 3.1.1).

Accordingly, the proposed Project would not change the deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake, and no impact would occur. In addition, since all runoff would be retained within the SMP 139R1 site (or within the SMP 150 site following relocation of the down-drain structure), the Project would not result in any increase in water erosion either on- or off-site. Moreover, the Project would be required to comply with the BMPs identified in the site-specific WQMP, which would further preclude the potential for increased erosion. BMPs identified as part of the site-specific WQMP would be enforced as conditions of approval by Riverside County. Therefore, impacts would be less than significant.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to erosion resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

Construction of the down-drain structure did not result in a substantial change in the amount of runoff leaving the site as compared to historic (natural) conditions. Under historical (natural) conditions, during most years, including during the 2- and 25-year storm events, these flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). Flows from the site only were conveyed downstream during peak storm events (i.e., 50- and 100-year storm events), which have a likelihood of occurrence of only 1 to 2 percent in a given year.

Given these conditions, construction of the down-drain structure did not result in a substantial change in the deposition, siltation, or erosion affecting the channel of any river or stream or the bed of a lake. Historically, flows from the site only reached Temescal Creek and other downstream tributaries during 50- and 100-year storm events, which have a likelihood of occurrence of 1 to 2 percent in a given year. The elimination of flows from the site during these peak storm events resulted in a negligible reduction in the amount of deposition and siltation reaching downstream tributaries. This minor reduction in flows during 50- and 100-year storm events also likely reduced the potential for water-related erosion hazards in downstream areas. Thus, the construction of the down-drain structure did not change the deposition, siltation, or erosion potential in the Project's drainage basin in a manner

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

that would modify the channel of a river or stream or the bed of a lake, nor did it result in an increase in water erosion in downstream areas.

Mitigation: No mitigation is required beyond mandatory compliance with the BMPs specified in the site-specific WQMP, which would be enforced as part of the Project's conditions of approval.

Monitoring: Annual inspections will verify compliance with the Project's conditions of approval.

20. Wind Erosion and Blowsand from project either on or off site. a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?	☐	☐	☒	☐

Source: General Plan, Figure S-8 (Wind Erosion Susceptibility Map); Ord. 460, Sec. 14.2; Ord. 484

Findings of Fact: During mining operations, all unpaved roads and active mining areas would be required to be wetted, through either the use of water or approved dust control suppressants, as part of the Project's conditions of approval (similar to what occurs under existing conditions). In addition, upon completion of the IDEFO, soil stabilizers would be utilized for dust control as required by the Reclamation Plan. Compliance with SCAQMD rules also would be required during the life of the permit. Specifically, and in accordance with SCAQMD rule 403, all operations will be suspended when wind speeds exceed 25 MPH. Once mining is completed and reclamation has begun, the revegetation would ensure long-term compliance with wind erosion and blowsand requirements. Moreover, according to Riverside County General Plan Figure S-8, the Project area is subject to only "moderate" wind erosion hazards. Accordingly, impacts due to wind erosion and blowsand would be less than significant.

Mitigation: No mitigation is required beyond mandatory compliance with the BMPs specified in the site-specific WQMP, which would be enforced as part of the Project's conditions of approval.

Monitoring: Annual inspections will verify compliance with the Project's conditions of approval.

GREENHOUSE GAS EMISSIONS Would the project				
21. Greenhouse Gas Emissions a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Source: *Air Quality and Greenhouse Gas Evaluation Report for Surface Mining Permit Revision (SMP 139R1) & Conditional Use Permit (CUP 03679).* Associates Environmental, July 2013; *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold.* South Coast Air Quality Management District, October 2008..

Findings of Fact:

a & b) Provided below is a discussion and analysis of the Project's potential to result in significant impacts associated with greenhouse gas (GHG) emissions.

Background

A greenhouse gas is a gas that has the ability to absorb infrared radiation or heat. For the purposes of this analysis the three main greenhouse gases are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Other GHG's include sulfur hexafluoride (SF_6), hydrofluorocarbons (HFC's), and perflourocarbons (PFC's). Each gas has different abilities to absorb heat and different lifetimes within the atmosphere. A global warming potential (GWP) is assigned to each GHG based on is relative strength compared to CO_2. The global warming potential of CH_4 is 21 CO_2 equivalents (CO_2e), N_2O is 310 CO_2e, SF_6 is 23,900 CO_2e, HFC's and PFC's have a range of GWP's. Total GHG emissions are calculated in CO_2e. Many human activities, such as combustion of fossil fuels, are known to release these gases into the atmosphere. The heat absorbing ability of GHG's enables them, theoretically, to affect the Earth's heat balance. Climate is in large part regulated by the Earth's heat balance; therefore a substantial amount of GHG's released by human activities may cause changes to the climate of Earth.

Regulatory Setting

Since 2005, when Governor Arnold Schwarzenegger signed Executive Order S-3-05 which calls for the reduction of California's GHG emissions to 1990 levels by 2020, GHG regulation has been an emerging arena for California. With respect to the proposed Project, the most important regulatory changes have been:

- The adoption of SB 97, CEQA greenhouse gas emissions, which requires GHGs to be considered when determining a project's environmental impact in California Environmental Quality Act (CEQA) compliance documents;
- The adoption of a CEQA GHG significance threshold for projects under the jurisdiction of the SCAQMD on December 2008 which established the threshold of significance for stationary source emissions associated with industrial projects;
- The County of Riverside recognizes the SCAQMD CEQA GHG threshold as the applicable industrial project CEQA GHG threshold for the County; and
- The release of a Draft Standard Operating Procedure with a CEQA GHG threshold for projects within the County of Riverside in May 2010 for consideration by County staff[3].

Methodology and Thresholds for Determining Significance

This analysis is prepared pursuant to the requirements and procedures used by the County of Riverside Planning Department and the SCAQMD's procedure for the estimation of greenhouse gas emissions for documents undergoing CEQA review. The impact of a project can be assessed by comparing the Project's emissions from the site to the thresholds identified by the County of Riverside and as established by the SCAQMD. SCAQMD has established an interim GHG significance threshold of 10,000 $MTCO_2e$ for industrial projects, excluding offsite emissions due to transportation. The County of Riverside has recognized the SCAQMD threshold as the significance threshold for industrial projects within its jurisdiction. The County's Draft SOP, which is not currently used in the County[3], identifies a GHG significance threshold of 7,000 $MTCO_2e$ for non-transportation related emissions (also referred to herein as "area source emissions"). The County of Riverside also requires

[3] Note that although Riverside County identified a threshold of significance for GHG emissions, the threshold of significance is not currently enacted within the County; thus, there is no "adopted" threshold within the County of Riverside against which a project's GHG emissions may be evaluated.

the implementation of transportation and construction California Air Resources Board (CARB) performance standards for projects that fall under this threshold, at this time CARB is still drafting these performance standards; thus, compliance with the (not yet established) CARB performance standards is not currently required in the County. If a project's area source-related GHG emissions are less than the 10,000 $MTCO_2e$ threshold, then area source impacts associated with GHGs are considered less than significant and no mitigation would be required.

Project Greenhouse Gas Emissions Estimates
The GHG emissions analyzed herein are those estimated to be generated from the site during only the 2013 operating year with a total annual material import/export of 2,000,000 tons (it should be noted that the Project's share of the total tonnage comprises approximately 24.26%, or 485,199 tons per year).

Operational activities at the Project site result in GHG emissions from off-road diesel engine combustion, on-road diesel engine combustion, worker vehicle trips (generally gasoline engine combustion), electricity use, water use, and waste disposal. Year 2013 was selected as a conservative analysis year because in future years it is expected that air pollutant emissions from diesel fueled vehicles will decrease as state and federal regulatory standards for emissions control become more stringent (refer also to the discussion and analysis of Issues 6.b) and 6.c)).

The Project site GHG emissions from off-road diesel engine combustion, on-road diesel engine combustion, worker vehicle trips, electricity use, water use, and waste disposal were calculated using the CalEEMod model. Since there is no relevant land-use type for "mining" within CalEEMod to accurately portray the Project, the Project site was treated as a yearlong phase of construction grading. This allowed for the modeling of emissions from off-road diesel equipment, on-road trucks hauling material, and worker travel.

Total emissions from the proposed Project site are summarized in Table EA-6, *Total Greenhouse Gas Emissions (Baseline Plus Project Conditions)*. As shown in Table EA-6, total GHG emissions would comprise 9,938.90 metric tons (MT) per year (of which 24.26%, or 2,411.18 MT, would be attributable to the proposed Project). It should be noted that these emissions would occur annually throughout the duration of the proposed Project (including the additional 50 years of permit life that would be allowed under SMP 139R1).

Impact Analysis
To assess the Project's GHG impact, the Project's emissions were compared to the significance thresholds described above. As shown in Table EA-7, *Significance of Project-Related GHG Emissions*, GHG emissions attributable to the proposed Project would be below the identified significance thresholds. Total GHG emissions attributable to the proposed Project (including mobile-source related emissions) would comprise 2,411.18 MT/year, which would be reduced to 1,688.33 MT/year when off-site sources are excluded. With or without consideration of off-site sources, GHG emissions attributable to the Project are below the identified significance threshold of 10,000 MT/year. As concluded by the SCAQMD, the screening level threshold of 10,000 MT/year is intended to "...capture projects that represent approximately 90 percent of GHG emissions from new sources" (SCAQMD, 2008). Projects that emit fewer than 10,000 MT/year are considered by the SCAQMD to have a less than significant impact due to GHG emissions on both a direct and cumulative basis. Additionally, the Project's emissions (excluding off-site emissions) also would be below the County's Draft SOP threshold of 7,000 MT/year, although this threshold is not currently applied to projects in

Table EA-6 Total Greenhouse Gas Emissions (Baseline Plus Project Conditions)

Category	Bio-CO2 (MT/yr)	NBio-CO2 (MT/yr)	Total CO2 (MT/yr)	CH4 (MT/yr)	N2O (MT/yr)	CO2e (MT/yr)
Mine Operation On-Site Emissions Estimated by CalEEMod						
Off-Road	0.00	5,264.96	5,264.96	0.40	0.00	5,273.46
Mine Operation Off-Site Emissions Estimated by CalEEMod						
Hauling	0.00	2,970.88	2,970.88	0.08	0.00	2,972.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	40.14	40.14	0.00	0.00	40.19
Mine Operational Emissions Estimated by CalEEMod						
Electricity	0.00	727.18	727.18	0.03	0.01	731.74
Water by Land Use	0.00	909.12	909.12	0.04	0.02	914.82
Waste by Land Use	2.77	0.00	2.77	0.16	0.00	6.21
Total Mine Operation Emissions Estimated by CalEEMod						
Total	**2.77**	**9,912.27**	**9,915.04**	**0.71**	**0.03**	**9,938.90**
***Some totals include discrepancies created by rounding in the CalEEMod output**						

Note: The values depicted in Table EA-6 indicate total emissions from the Project site with implementation of the proposed Project. The proposed Project only comprises 24.26% of the total mining-related emissions from the site; accordingly, Project-related emissions only would comprise 24.26% of the emissions presented in Table EA-6.

the County. As presented in Table EA-7, even when considering emissions from existing mining operations on-site, total emissions from the site (inclusive of off-site emissions, which are not considered in the SCAQMD's screening threshold of 10,000 MT/year) comprise only 9,938.90 MT/year; thus, the Project's proposal to extend the life of the existing mining permits by a duration of approximately 50 years would not result in any direct or cumulatively significant impacts due to GHG emissions.

Conclusion

Based on the analysis presented above, the proposed Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. A less than significant impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Table EA-7 Significance of Project-Related GHG Emissions

	Bio-CO_2 (MT/yr)	NBio-CO_2 (MT/yr)	Total CO_2 (MT/yr)	CH_4 (MT/yr)	N_2O (MT/yr)	CO_2e (MT/yr)
Total Project Site Emissions	2.77	9,912.27	9,915.04	0.71	0.03	9,938.90
Project Emissions (24.26% of Total)	0.67	2,404.72	2405.39	0.17	0.01	2,411.18
Project Emissions minus Offsite Sources	0.67	1,674.24	1,674.91	0.15	0.03	1,688.33
County of Riverside Threshold (Recognized) and SCAQMD Interim Threshold						**10,000**
County of Riverside Threshold (Draft SOP)						**7,000**
Is there significant impact?						**No**
Is there significant impact?						**No**

In addition, the proposed Project would comply with the significance thresholds described herein. There are no other plans, policies, or regulations adopted for the purpose of reducing GHG emissions that are applicable to the Project area; accordingly, the proposed Project would have no potential to conflict with such plans, policies, or regulations. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

HAZARDS AND HAZARDOUS MATERIALS Would the project				
22. Hazards and Hazardous Materials a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

Source: Project Application Materials

Findings of Fact:

a & b) The only hazardous materials associated with existing and planned operations on the Project site are associated with oils and fuels for mining-related equipment. Equipment is fueled from an above-ground storage tank located on the property that is housed in a structure with secondary containment measures, which is designed to reduce the potential for spills. The routine transport of aggregate materials would not result in any significant hazards to the public or the environment. Waste generated on-site is limited to non-hazardous waste piles and refuse from site workers. Waste piles would be disposed of on-site as part of the Reclamation Plan, while refuse would be disposed of in accordance with County requirements. Furthermore, the mining operation is inspected on an annual basis by the County of Riverside Department of Environmental Health (DEH) for any hazardous materials problems. No prior violations have been identified by the DEH. Accordingly, potential impacts due to the routine transport, use, and disposal of hazardous materials, and the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, would be less than significant.

c) The proposed Project site and off-site impact areas are not located within any adopted emergency response plans or emergency evacuation plans. Furthermore, there are no residential structures or businesses that require access through the area in emergencies, as the area is accessed by a private roadway. Accordingly, no impact would occur.

d) Areas proposed for mining as part of the Project would occur as close as 925 feet from an existing school facility (Todd Elementary School). However, the Project would involve aggregate mining activities, which are not associated with the emission or storage of acutely hazardous materials, substances, or waste. Additionally, areas proposed for mining activities as part of the Project would be approximately 175 feet further away from the school site than the existing permitted operation. Accordingly, hazardous materials impacts to nearby school facilities would not occur.

e) The proposed Project site and off-site improvement areas are not included on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Accordingly, no impact would occur.

Mitigation: No mitigation is required beyond standard compliance with permit conditions and applicable ordinances related to hazardous wastes.

Monitoring: Annual Inspections from Riverside County and periodic inspections from DEH and MSHA will confirm compliance with permit conditions and applicable ordinances related to hazardous waste.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
23. Airports a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source: General Plan, Figure S-19 (Airport Locations); GIS database

Findings of Fact:

a through d) The proposed Project site and off-site impact areas are not located within any Airport Master Plans, airport influence areas, or airport compatibility zones, and would therefore not require review by the Airport Land Use Commission. In addition, the Project site is not located within the vicinity of any public or private airports or heliports. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

24. Hazardous Fire Area a) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Source: General Plan, Figure S-11 (Wildfire Susceptibility); Riverside County GIS.

Findings of Fact: According to Riverside County GIS data, the proposed Project site and off-site impact areas are located within an area that is mapped as having a "high" susceptibility to wildland fire hazards. The Project does not propose to construct any structures on the property that could expose people to a significant risk of loss, injury, or death associated with wildland fires. Additionally, the Project would not increase the number of people permitted to work on the property or access the property so there would be no increase in fire risk associated with people, Moreover, the Project site and areas to the west and south are fully disturbed and contain very little vegetation under existing conditions that could be susceptible to wildfire. Existing residential areas to the north and east are protected by fuel management zones and no activities proposed by the Project would increase the risk of wildfire. Furthermore, following reclamation the site would be planted with plant species that are not considered to pose a threat of wildland fire hazards. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Monitoring: No monitoring is required.				
HYDROLOGY AND WATER QUALITY Would the project				
25. Water Quality Impacts a) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
b) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
e) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
f) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
g) Otherwise substantially degrade water quality?	☐	☐	☐	☒
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors)?	☐	☐	☐	☒

Source: *Preliminary Hydrology Study & Drainage Analysis.* Joseph E. Bonadiman & Associates, Inc., August 2011; *Technical Memorandum, Hydrology & Hydraulics/WQMP for Updated SMP00139R1.* Joseph E. Bonadiman & Associates, Inc., December 5, 2012; *Project Specific Water Quality Management Plan.* Joseph S.C. Bonadiman & Associates, Inc., August 2011; Waiver of Waste Discharge Requirements; *Mayhew Aggregates – Historic Storm Runoff,* Chang Consultants, June 13, 2013.

Findings of Fact:

a) A hydrology study and water quality management plan were prepared for the proposed Project by Joseph E. Bonadiman & Associates, Inc. in August 2011. As indicated in the report, the proposed Project site and off-site impact areas are located within a watershed comprising approximately 3,045 acres total. Of this, 2,990 acres were analyzed by the Project's hydrologist (refer to Appendix F1) to determine runoff volumes (approximately 2,525 acre-feet [a.f.] of total runoff for the 100-year, 24-hour storm event). The existing excavated pits collect and retain approximately 2,442 a.f. of this runoff

from approximately 2,826 acres of the watershed (including the entire runoff from the Mayhew Creek watershed).

The remaining 164-acre drainage area, which occurs in a northerly-trending watercourse along the eastern edge of the proposed Project site, does not discharge to the main pit. This drainage results in a peak 100-year discharge of approximately 311 cubic-feet-per-second (c.f.s) through an existing 30-foot culvert running under Temescal Canyon Road. Approximately 9.5 a.f. of this runoff is retained within the existing excavation pit located at the northeast portion of the proposed Project site; the remaining 73.5 a.f. is discharged through the existing culvert.

The Mayhew Creek watershed (point of discharge at the southern property limits) is estimated to produce approximately 211 acre feet of debris, which includes soil, vegetation, and considerations for burn conditions, as required in the County Flood Control Handbook for the 100-year storm event.

As concluded in these reports, with exception of the existing drainage feature, all other tributary and on-site runoff would be retained on-site within the excavated pits and would not discharge to downstream conveyances/receiving waters. In addition, the proposed Project would not impact the existing drainage feature located along the eastern perimeter of the Project site. The proposed Project would result in changes to the site's drainage patterns by expanding areas subject to mining activities; however, such changes would not alter the course of a stream or river in a manner that would result in substantial erosion or siltation on- or off-site. In addition, because all runoff would be retained on the property and allowed to infiltrate into the ground, the Project would not result in any increase in the amount of runoff discharged from the site. Moreover, the Project shall be required to comply with the best management practices (BMPs) identified in the site-specific WQMP (which are similar to those that occur under existing conditions), which would further preclude the potential for increased erosion. BMPs identified as part of the site-specific WQMP would be enforced as conditions of approval by Riverside County. Therefore, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As previously summarized in MND Section 2.4.2, and based on the findings of Chang Consultants (Technical Appendix K), historically drainage from the Project site (including upstream tributaries) sheet flowed across the Project site. During most years, including during the 2- and 25-year storm events, virtually all of the flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). As part of the mining activities that commenced in the 1970s, drainage from the Mayhew Creek was diverted around the SMP 139 mining areas via a man-made earthen channel, which resulted in an increase in flows from the Project site as compared to historic (natural) conditions.

In January/February 2005, heavy rains, combined with geological movement along the Glen Ivy Fault line, caused the bank between the Mayhew Creek and the SMP 139 pit wall to substantially erode and partially collapse into the SMP 139 mining pit. As a result, flows from Mayhew Creek began to

discharge immediately into the SMP 139 gravel pit and created instability issues with respect to the southern slopes of the mining pit. In order to address this emergency condition, in early 2005 the mining operator constructed a concrete down-drain structure measuring approximately 300 feet in length along the southern pit wall of the SMP 139 site. The intent of this down-drain structure was to stabilize the southern pit wall against water erosion hazards. With completion of the down-drain structure, flows from the Mayhew Creek were fully detained within the SMP 139 pit and no longer were conveyed downstream to the Temescal Wash (even during large storm events).

Construction of the down-drain structure resulted in a measurable decrease in the amount of flows leaving the site, as compared to the conditions that occurred following commencement of mining operations (when flows from Mayhew Creek were diverted around the mining areas via a man-made earthen channel). However, when compared to the historic (natural) drainage conditions of the site, the construction of the down-drain structure did not result in a change in the amount of flows reaching downstream tributaries during most years (including years during which the 2- and 25-year storm events occurred). As compared to historical (natural) conditions, construction of the down-drain structure (and diversion of most of the Mayhew Creek flows into the SMP 139 pit) only a negligible reduction in the amount of flows reaching downstream tributaries (including Temescal Creek) during peak storm events (i.e., 50- and 100-year storm events), which have a likelihood of occurrence of only 1 to 2 percent in a given year.

Thus, although the construction of the down-drain structure redirected a majority of the flows from Mayhew Creek into the SMP 139 mining pit, the reduction in flows did not result in a substantial alteration of the historic drainage pattern for the site. During most years (approximately 98% of the time), the down-drain structure did not result in any change in the amount of surface flows reaching downstream tributaries. The only change to drainage patterns that resulted from the construction of the down-drain structure is that a portion of the flows from the site that were conveyed downstream during 50- and 100-year storm events (with a 1 to 2 percent chance of occurrence in any given year) are instead retained on-site. The construction of the down-drain structure therefore did not substantially alter the drainage pattern of the site or area as compared to historical (natural) conditions.

b) As discussed under the evaluation of Threshold 25.a), a WQMP was prepared for the proposed Project, which identifies BMPs to address Project-related runoff. The WQMP concludes that, with the mandatory incorporation of BMPs (which would be enforced as part of the Project's conditions of approval), the proposed Project would not violate any water quality standards, including, but not limited to, sediment, nutrients, trash/debris, oxygen-demanding substances, bacteria/viruses, oil/grease, pesticides, metals, organic compounds, or other pollutants.

Pursuant to California Water Code, Section 13269, the California Regional Water Quality Control Board (RWQCB) Board adopted Resolution No. R8-2007-0036, waiving waste discharge requirements for specific types of discharges, including the proposed IDEFO and mining activities. In addition, on October 3, 2011 the California Regional Water Quality Control Board (RWQCB), Santa Ana Region, issued a waiver of waste discharge requirements for the proposed Project (a copy of which is contained within Appendix F2). The waiver indicates that operations proposed as part of the Project, including aggregate mining activities and IDEFO operations, are waived from the requirements of Section 13263 of the California Water Code, subject to the following Project-specific conditions:

- No greenwaste, woodwaste, gypsum or drywall are allowed as inert waste;

- Controls sufficient to contain all surface runoff are installed, where necessary, and;
- The site will be adequately secured to prevent unauthorized disposal by the public.

As concluded in this waiver, a load checking program will be implemented to assure that only inert wastes are disposed of at the site. In order to ensure compliance with the above-described requirements, Mitigation Measure M-WQ-1 has been identified, which would preclude impacts due to a violation of water quality standards or waste discharge requirements.
Accordingly, impacts to water quality would be potentially significant if the Project were to fail to adhere to the conditions specified in the waiver of discharge requirements as approved by RWQCB Board adopted Resolution No. R8-2007-0036.

c) Water used at the proposed Project site is delivered by the EVMWD, and no wells are operated on-site. The proposed Project would not result in a net increase in the amount of impervious surfaces on-site. Furthermore, the proposed Project would not result in a net increase in the amount of water already delivered to the site by EVMWD under existing conditions. Accordingly, the proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge, and there would be no net deficit in aquifer water volumes or groundwater table levels as a result of the Project. Accordingly, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As previously summarized in MND Section 2.4.2, and based on the findings of Chang Consultants (Technical Appendix K), historically drainage from the Project site (including upstream tributaries) sheet flowed across the Project site. During most years (i.e., approximately 98% of the time), including during the 2- and 25-year storm events, these flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). Flows traversing the site only were conveyed downstream during peak storm events (i.e., 50- and 100-year storms), with a 1 to 2 percent chance of occurrence in any given year.

Prior to construction of the down-drain structure in 2005 and after commencement of mining activities on-site ("interim period"), a majority of flows that otherwise would have infiltrated into the groundwater table through percolation on-site were instead diverted via a man-made earthen channel. Accordingly, during this time a majority of runoff that would have infiltrated into the ground was instead conveyed downstream, thereby increasing the amount of runoff from the site as compared to historic (natural) conditions.

Following construction of the down-drain structure, flows entering the site were instead routed into the SMP 139 mining pit where all flows were allowed to infiltrate into the groundwater table. Since under historical (natural) conditions the vast majority of flows also infiltrated into the groundwater table and were not conveyed downstream except during the 50- and 100-year storm events (with a 1 to 2 percent chance of occurrence during any given year), the drainage conditions of the site that existed after construction of the down-drain structure more closely resembled the historical (natural) drainage

patterns of the site as compared to drainage patterns that existed during the interim period. Since a virtually all of the flows from Mayhew Creek and the Project site were detained on-site and allowed to infiltrate into the groundwater table, the construction of the down-drain structure did not result in a substantial depletion of groundwater supplies, nor did it interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the groundwater table level.

d) As indicated under the evaluation of Threshold 25.a), the proposed Project would retain all runoff water on the property and would not discharge to downstream conveyances/receiving waters, with exception of the existing runoff that occurs along the eastern perimeter of the SMP 139R1 site (which would be retained as part of the Project). Because no changes to the rate or amount of runoff along the site's eastern perimeter are proposed as part of the Project, the Project would have no potential to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Moreover, the Project would be required to comply with the BMPs identified in the WQMP (refer to Appendix F2), which would ensure that the Project would not result in the creation of polluted runoff. Accordingly, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As indicated under the discussion of Historical Drainage Conditions under Issues 25 a) and c), construction of the down-drain structure diverted all upstream flows entering the site into the SMP 139 pit, where it was allowed to infiltrate into the groundwater table. This condition represented a reduction in flows from the site compared to the interim period following commencement of mining activities and construction of the down-drain structure. As such, construction of the down-drain structure did not result in the creation or contribution of runoff water that would exceed the capacity of existing or planned stormwater drainage systems, nor did it result in substantial additional sources of polluted runoff.

e & f) The proposed Project site is located partially within a 100-year floodplain; however, the proposed Project does not involve the construction of any buildings or structures that would impede or redirect flood flows, and the proposed Project would not result in the construction of any housing. Accordingly, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

As indicated under the discussion of Historical Drainage Conditions under Issues 25 a) and c), construction of the down-drain structure diverted all upstream flows entering the site into the SMP 139 pit, where it was allowed to infiltrate into the groundwater table. Thus, construction of the down-drain structure did not result in the exposure of housing or structures located downstream to increased flood hazards.

g) Mandatory compliance with the BMPs specified in the Project's WQMP (refer to Appendix F2) would ensure that the Project does not result in any other impacts to water quality; accordingly, no impact would occur.

h) The existing and planned retention basins are designed to allow for infiltration of runoff, thereby precluding the potential for vectors (i.e., mosquitoes) and odors. In addition, the retention basin is not planned to be increased in size as part of the Project, and would therefore not result in any new vector hazards beyond what occurs under existing conditions. There are no other BMP devices associated with the Project that could result in significant environmental effects. Accordingly, a less than significant impact would result from the Project's BMPs.

Mitigation:

M-WQ-1 (Condition of Approval 10.Planning.40) Throughout the life of operation of the Inert Debris Engineered Fill Operation (IDEFO), the following conditions shall apply:

- No greenwaste, woodwaste, gypsum, or drywall are allowed as inert waste;
- Controls sufficient to contain all surface runoff from the IDEFO areas shall be installed, where necessary; and
- The site shall be adequately secured to prevent unauthorized disposal by the public.

Monitoring:

M-WQ-1 Riverside County shall ensure compliance with Mitigation Measure M-WQ-1 during annual inspections of the SMP 139R1 site.

26. Floodplains

Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

NA - Not Applicable ☒ U - Generally Unsuitable ☐ R - Restricted ☐

a) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
b) Changes in absorption rates or the rate and amount of surface runoff?	☐	☐	☐	☒
c) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area)?	☐	☐	☐	☒
d) Changes in the amount of surface water in any	☐	☐	☐	☒

water body?

Source: General Plan, Figure S-9 (100- and 500-Year Flood Hazard Zones); General Plan, Figure S-10 (Dam Failure Inundation Zones); GIS database; *Preliminary Hydrology Study & Drainage Analysis.* Joseph E. Bonadiman & Associates, Inc., August 2011; *Technical Memorandum, Hydrology & Hydraulics/WQMP for Updated SMP00139R1.* Joseph E. Bonadiman & Associates, Inc., December 5, 2012; *Project Specific Water Quality Management Plan.* Joseph S.C. Bonadiman & Associates, Inc., August 2011.

Findings of Fact:

a) The natural drainage pattern of the Project site and off-site impact areas has been modified by mining operations over the past 35 ± years. The proposed Project would allow for an increase in areas subject to mining, and therefore would result in further changes to the drainage pattern of the site. However, and as indicated under the evaluation of Threshold 25.a), prior to the expansion of mining activities to include the slope and setback areas at the site's southern edge, the Project shall retain all runoff water on the property and would not discharge to downstream conveyances/receiving waters, with exception of the existing runoff that occurs along the eastern perimeter of the Project site. All runoff, including a majority of the flows from Mayhew Creek, shall be retained on-site as part of the Project's Reclamation Plan (refer to MND Figure 3-2), with exception of the existing flows that occur along the eastern perimeter of the Project site that would be unaffected by the Project. As such, the Project has no potential to result in an increased chance of flooding for off-site properties. Retention facilities constructed on-site have been designed to accommodate 100-year storm events and no changes are proposed to the existing retention facilities, indicating that the Project site and off-site impact areas would not be subject to increased flood hazards as compared to existing conditions.

Ultimate mining activities associated with SMP 139R1 also would result in the relocation of the existing down-drain structure located in the southern portion of the site. As discussed previously, the down-drain structure shall not be relocated, if at all, until the relocation is approved by all applicable governmental agencies. Moreover, in the event that appropriate approvals for relocation of the down-drain structures are not granted by all applicable governmental agencies, then on-site mining activities affecting the down-drain structure would be disallowed pursuant to the Project's conditions of approval (as discussed in MND Section 3.1.1).

As a result, the location at which the existing Mayhew Creek drainage is diverted into a detention basin would occur approximately 2,500 feet south of the existing down-drain structure location. Relocation of the down-drain structure also cannot occur until SMP 150 is revised to identify the precise design for the relocated down-drain structure, to accommodate a detention basin of adequate size, and to allow for mining of the off-site portions of the slopes and setback areas between SMP 139R1 and SMP 150. Once the down-drain structure is relocated to the SMP 150 site and an appropriately-sized detention basin is constructed on the SMP 150 site, reclamation of the SMP 139 site would occur as depicted on MND Figure 3-3. As indicated in the Project's hydrology study (refer to Technical Appendix F1), existing 100-year flows from the site total approximately 67.5 cubic feet per second (cfs); with implementation of the ultimate reclamation plan (as shown on MND Figure 3-3), these flows would be slightly increased to 70 cfs. Along the existing drainage at the eastern perimeter of the SMP 139 site, existing flows comprise approximately 311 cfs (during peak overflow conditions); under the proposed Project, these peak flows would slightly increase to 389 cfs, but such flows would be discharged into an existing culvert. The Project's drainage plan has been reviewed by the Riverside County Flood Control and Water Conservation Department, and was determined to provide

for sufficient attenuation of runoff from the site to preclude significant flooding impacts to downstream properties. Accordingly, with ultimate reclamation of the SMP 139R1 site, impacts due to flooding on- or off-site would be less than significant.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As indicated under the discussion of Historical Drainage Conditions under Issues 25 a) and c), construction of the down-drain structure diverted all upstream flows entering the site into the SMP 139 pit, where it was allowed to infiltrate into the groundwater table. Thus, construction of the down-drain structure did not result in a substantial alteration to the existing drainage pattern or a substantial increase in the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

b) The proposed Project would increase areas subject to mining activities. However, proposed mining activities would have no adverse effect on absorption rates relative to existing conditions, as the Project would not result in an increase in impervious surfaces. As indicated under the evaluation of Threshold 25.a), the Project would retain all runoff water on-site and would not discharge to downstream conveyances/receiving waters. Therefore, all rain water falling on the property would continue to percolate into the ground as occurs under existing conditions and there would be no change in the rate or amount of surface runoff. Accordingly, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As previously summarized in MND Section 2.4.2, and based on the findings of Chang Consultants (Technical Appendix K), historically drainage from the Project site (including upstream tributaries) sheet flowed across the Project site. During most years (i.e., approximately 98% of the time), including during the 2- and 25-year storm events, these flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). Flows traversing the site only were conveyed downstream during 50- and 100-year storm events, which have a 1 to 2 percent chance of occurrence in any given year.

Prior to construction of the down-drain structure in 2005 and after commencement of mining activities on-site ("interim period"), a majority of flows that otherwise would have infiltrated into the groundwater table through percolation on-site were instead diverted via a man-made earthen channel. Accordingly, during this time a majority of runoff that would have infiltrated into the ground was

instead conveyed downstream, thereby increasing the amount of runoff from the site as compared to historic (natural) conditions.

Following construction of the down-drain structure, flows entering the site were instead routed into the SMP 139 mining pit where all flows were allowed to infiltrate into the groundwater table. Since under historical (natural) conditions the virtually all of the flows from the site also infiltrated into the groundwater table and were not conveyed downstream (except during 50- and 100-year storm events), the drainage conditions of the site that existed after construction of the down-drain structure more closely resemble the historical (natural) drainage patterns of the site as compared to drainage patterns that existed during the interim period. Thus, although construction of the down-drain structure resulted in a change in absorption rates and the rate and amount of surface runoff discharged from the site, such changes replicated a majority of the historical (natural) flows from the site and did not result in any adverse environmental effects to downstream properties or the environment.

c) Although the proposed Project site and off-site impact areas are subject to flood hazards, the Project would not involve the construction of any new structures that would be subject to flood risks. Additionally, the Project would not increase the number of people permitted to work on the property or access the property so there would be no increase in flood risk associated with people, Additionally and as discussed under Threshold 26.a), the proposed Project has no potential to result in an increased chance of flooding for off-site properties. In addition, according to Figure S-10 of the Riverside County General Plan, the Project area is not subject to dam inundation hazards and no aspect of the Project would modify any levee or dam. Accordingly, no impact would occur.

d) As indicated under the evaluation of Threshold 25.a), the Project would retain all runoff water on the property and would not discharge water to any downstream conveyances/receiving waters. All runoff flowing across the property that originates upstream and from within the Project site and off-site impact areas themselves also are retained within the on-site retention basin under existing conditions. As such, Project implementation would not result in a change in the amount of surface water in any water body. Accordingly, no impact would occur.

Discussion of Historical Drainage Conditions

As discussed in MND Section 1.4.4, the following discussion is provided for informational purposes only. As previously noted, the Project's environmental baseline conditions are established by CEQA as those conditions that existed when environmental analysis for the Project commenced (i.e., early 2010). Although the following discussion relates to an analysis of impacts to biological resources resulting from the construction of the down-drain structure in early 2005, construction of the down-drain structure is not a part of the proposed Project since the structure was already constructed prior to applications having been filed for the proposed Project.

As previously summarized in MND Section 2.4.2, and based on the findings of Chang Consultants (Technical Appendix K), historically drainage from the Project site (including upstream tributaries) sheet flowed across the Project site. During most years (i.e., approximately 98% of the time), including during the 2- and 25-year storm events, these flows infiltrated into the groundwater table and were not conveyed to downstream tributaries (including Temescal Creek). Flows traversing the site only were conveyed downstream during 50- and 100-year storm events, which have a 1 to 2 percent chance of occurrence in any given year.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Prior to construction of the down-drain structure in 2005 and after commencement of mining activities on-site ("interim period"), a majority of flows that otherwise would have infiltrated into the groundwater table through percolation on-site were instead diverted via a man-made earthen channel. Accordingly, during this time a majority of runoff that would have infiltrated into the ground was instead conveyed downstream, thereby increasing the amount of runoff from the site as compared to historic (natural) conditions.

Following construction of the down-drain structure, flows entering the site were instead routed into the SMP 139 mining pit where all flows were allowed to infiltrate into the groundwater table. Since under historical (natural) conditions the virtually all of the flows from the site also infiltrated into the groundwater table and were not conveyed downstream except during the 50- and 100-year storm events (with a chance of occurrence of only 1 to 2 percent in a given year), the drainage conditions of the site that existed after construction of the down-drain structure more closely resemble the historical (natural) drainage patterns of the site as compared to the drainage conditions that existed during the interim period. Accordingly, and as compared to historic conditions, construction of the down-drain structure did not result in a substantial change in the amount of surface water in any water body.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

LAND USE/PLANNING Would the project				
27. Land Use				
a) Result in a substantial alteration of the present or planned land use of an area?	☐	☐	☐	☒
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	☐	☐	☐	☒

Source: General Plan; Riverside County GIS, Project Application Materials; Corona General Plan, Figure 12 (Sphere of Influence Land Use Plan).

Findings of Fact:

a) The Project proposes an extension of time for an existing mining operation (SMP 139), and would increase areas subject to mining activities on-site and within off-site areas located west, southwest, and south of the Project site. Areas proposed for mining expansion lie between existing mining pits and already are associated with the existing mining operations. Moreover, the Project would shift active mining activities as part of SMP 139 towards the west and away from the existing and proposed residential uses located easterly of the Project site. No new land uses are proposed on the site following completion of reclamation activities, and any new land uses (other than mining or open space) would require an amendment to the General Plan Land Use Element and Zoning Ordinance. There are no conditions associated with the proposed Project that would result in a substantial alteration of the present or planned land use of the area; accordingly, no impact would occur.

b) The proposed Project site is located in unincorporated Riverside County, within the sphere of influence for the City of Corona. It should be noted that the Project site and surrounding areas are currently being considered for annexation by the City of Corona. The proposed Project is consistent with the zoning and General Plan designations applied to the property by Riverside County (i.e.,

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

"Open Space – Mineral Resources" and "Mineral Resources and Related Manufacturing (M-R-A)," respectively).

According to Figure 12 of the City of Corona General Plan, the Project site and off-site impact areas are designated for "General Industrial" land uses, which allows for mining activities. Although the Project site may be annexed by the City of Corona, the land uses proposed by the Project would not conflict with the City's proposed General Plan land use designation for the site.

The proposed Project would involve an extension of time for an existing mining operation, and would not substantially alter the existing use of the property or range of uses allowed on the property after reclamation when mining activities are ceased. Accordingly, the proposed Project would not adversely affect land use within the City of Corona sphere of influence or Riverside County, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

28. Planning a) Be consistent with the site's existing or proposed zoning?	☐	☐	☐	☒
b) Be compatible with existing surrounding zoning?	☐	☐	☐	☒
c) Be compatible with existing and planned surrounding land uses?	☐	☐	☐	☒
d) Be consistent with the land use designations and policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?	☐	☐	☐	☒
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

Source: General Plan Land Use Element, Staff review, GIS database, Riverside County Ord. 348

Findings of Fact:

a) The proposed Project site and off-site impact areas are zoned by Riverside County for "Mineral Resources and Related Manufacturing (M-R-A)." No changes to the zoning designation are proposed as part of the Project. Also, the existing zoning designation is consistent with the Riverside County General Plan designation of "Open Space – Mineral Resources" applied to the property. Neither Riverside County nor the property owners of the Project site and off-site impact areas have plans to change the existing zoning of the Project site or off-site impact areas. The expansion of mining activities proposed as part of the Project is consistent with the existing M-R-A zoning designation; accordingly, no impact would occur.

b) Zoning designations surrounding the proposed Project site and off-site impact areas include the following: M-R-A to the west; M-R-A and "Natural Assets (N-A)" to the south; "Specific Plan Zone (SP Zone)" to the east; and SP Zone, "Manufacturing-Service Commercial (M-SC)," "Commercial Office (C-O)," and "Mobile Home Subdivisions & Mobile Home Parks (R-T)" to the north. The

proposed Project represents the continuation of an existing mining operation, and mining operations proposed as part of the Project would be shifted westerly as compared to the currently permitted mining areas (refer to Figure 3-4 of the Mitigated Negative Declaration). Furthermore, mining activities proposed as part of the Project would be consistent with the M-R-A zoning designations to the west and south, and would not conflict with the N-A zoning designation to the southwest. Proposed mining activities also would be consistent with the M-SC designation to the north. With respect to the Sycamore Creek Specific Plan located to the east of the Project site, adequate buffers and an earthen berm are provided or are planned by the Sycamore Creek developer along the western boundary of the Sycamore Creek Specific Plan to ensure that land use conflicts would not occur between the existing and proposed residential land uses and proposed mining operations. Construction of additional berms (where required) would be required pursuant to the Sycamore Creek Specific Plan development standards as well as the Conditions of Approval that have been imposed on the Sycamore Creek Specific Plan by Riverside County. The proposed Project site and off-site impact areas also are adequately buffered from the existing residential uses and planned commercial office uses to the north, due the intervening Temescal Canyon Road and planned business park/light industrial uses along the southern edge of Temescal Canyon Road. Accordingly, the proposed Project would be compatible with surrounding zoning designations, and no impact would occur.

c) General Plan designations surrounding the proposed Project site and off-site impact areas include the following: OS-MIN to the west; OS-MIN to the south; "Open Space – Conservation (OS-C)," "Open Space Recreation (OS-R)," and "Medium Density Residential (MDR)" to the east; and "Light Industrial (LI)," "Business Park (BP)," and "Medium High Density Residential (MHDR)" to the north. These General Plan designations are consistent with the existing zoning designations discussed above under Threshold 28.b). As indicated under the analysis of Threshold 28.b), the proposed Project would not conflict with the existing or planned land uses within the Project area. Additionally, the proposed Project represents the continuation of an existing mining operation, and mining operations proposed as part of the Project would be shifted westerly as compared to the currently permitted mining areas (refer to Figure 3-4 of the Mitigated Negative Declaration). Accordingly, no impact would occur.

d) The proposed Project site and off-site impact areas are designated for OS-MIN land uses by the County General Plan. Expanded mining operations proposed as part of the Project would be fully consistent with this land use designation. The proposed Project also would not conflict with any policies of the General Plan or the Temescal Valley Area Plan, as the proposed Project is limited to the expansion of an existing condition recognized by the General Plan and Area Plan. Accordingly, no impact would occur.

e) The proposed Project would result in the expansion of existing mining operations on-site and off-site between the excavation pits of existing mines. Areas to the west and south of the expansion area are planned for long-term conservation as natural open space, and no existing communities occur in these areas. The proposed Project therefore has no potential to result in the physical division of any established communities, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

MINERAL RESOURCES Would the project				
29. Mineral Resources	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	☐	☐	☒	☐

Source: General Plan, Figure OS-5 (Mineral Resources)

Findings of Fact:

a & b) According to Figure OS-5 of the Riverside County General Plan, the proposed Project site and off-site impact areas are designated within a Mineral Resources Zone 2 (MRZ-2) area (pursuant to the Surface Mining and Reclamation Act of 1975, or SMARA), which is defined by the State of California Department of Conservation SMARA Mineral Land Classification Project as "Areas where the available geologic information indicates that there are significant mineral deposits." The proposed Project would involve the continuation and expansion of an existing mining operation, which would result in the continued commercial extraction and production of the property's mineral resources. Accordingly, the proposed Project would make productive use of the property's mineral resources, as planned for and expected by Riverside County and the California State Mining and Geology Board, which oversees the SMARA. The Project would not result in any adverse impacts due to the loss of availability of a known mineral resource that would be of value to the region or the residents of the State, nor would the Project result in any impacts due to the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Conversely, the Project would allow continued use of the property's aggregate resources, which are of value to the State and the region. As such, no adverse impact would occur.

c) Areas located to the west and south of the proposed Project site and off-site impact areas comprise an existing surface mining operation. The expanded mining activities proposed as part of the Project would be inherently compatible with these existing operations. Accordingly, no impact would occur.

d) The Project site is accessed by a privately-owned roadway that is planned be gated to prevent people from trespassing into the active mining areas, and fencing is in place and would be maintained around active mining pits. Site workers also have the potential to be exposed to hazards inherent to mining operations, but such hazards would be addressed through mandatory compliance with federal, state, and local regulations governing working conditions in mines. Additionally, the Project would not increase the number of people permitted to work on the property because the number of workers on-site is determined by peak daily operations (and not annual operations); thus, the peak number of people working on-site would not change as a result of the Project. The Project also would not result in an increase in the number of people with access the property. Therefore, there would be no increase in mining hazards associated with people. Moreover, mining activities to be undertaken as part of the Project would be no more hazardous than the mining activities that occur on the property under existing conditions. Accordingly, impacts would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

NOISE Would the project result in

Definitions for Noise Acceptability Ratings

Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked.

NA - Not Applicable A - Generally Acceptable B - Conditionally Acceptable
C - Generally Unacceptable D - Land Use Discouraged

30. Airport Noise a) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels? NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒
b) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒

Source: General Plan, Figure S-19 (Airport Locations); Riverside County GIS.

Findings of Fact:

a & b) The Project site and off-site impact areas are not located within an airport land use plan, nor are there any public or private use airports or private airstrips located within two miles of the Project site or its off-site impact areas. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

31. Railroad Noise NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒

Source: General Plan, Figure C-1 (Circulation Plan); Riverside County GIS, On-site Inspection

Findings of Fact: The proposed Project site and off-site impact areas are not located near any railroads. Additionally, no aspect of the proposed Project involves railroad use or rail transport. Accordingly, no railroad-related noise impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

32. Highway Noise NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Source: On-site Inspection, Project Application Materials

Findings of Fact: The proposed Project involves a mining operation, which is not a noise sensitive land use that could be impacted by highway noise. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

33. Other Noise NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒

Source: Project Application Materials, Riverside County GIS.

Findings of Fact: The proposed Project involves a mining operation, which is not a noise-sensitive receptor. Therefore, there is no potential for the Project to be impacted by other noise generators and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

34. Noise Effects on or by the Project a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
b) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
c) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☒

Source: Riverside County General Plan, Table N-1 ("Land Use Compatibility for Community Noise Exposure"); Project Application Materials, *Noise Impact Analysis – SMP 139 Extension/Revision.* Hans Giroux, December 24, 2012.

Findings of Fact:

a & b) The proposed Project would result in two processing areas on-site for aggregate operations and for recycling construction and demolition debris. One processing area would be located south of the existing Southern California Edison (SCE) sub-station and has the potential to increase noise levels at existing residences located along Temescal Canyon Road. The second processing location would occur on-site and west of existing homes located in the Sycamore Creek Specific Plan. Compared to baseline conditions, the northern processing location would occur in the same location

as existing conditions, while the southern processing area would occur approximately 900 feet closer to the existing homes. Both locations would be shielded from a direct line-of-sight by intervening terrain.

Semi-trucks would be used to deliver IDEFO materials to the Project site. The IDEFO materials would then be used as fill as part of the site's reclamation plan. It could be stockpiled (if not immediately crushed) using a front end loader. Prior to crushing, the material would be inspected and any oversize pieces would be removed for processing elsewhere. After crushing, it would be stockpiled and then hauled away for use as engineered backfill in previously excavated gravel pits. The primary noise source from these activities would be the crusher. Mobile equipment (trucks and a loader) are inherently quieter and operate only intermittently.

According to the Project's noise consultant (Hans Giroux), the appropriate reference noise level (RNL) for the crusher is 85 dB Leq at a distance of 50 feet from the crusher. When other Project-related noise sources are included, the composite RNL is calculated by the Project's noise consultant to be approximately 86 dB at a distance of 50 feet.

Over distance, noise levels are reduced by a rate of approximately 6 decibels (dB) per doubling of distance (assuming flat terrain). The measured distance between noise generators on-site and off-site sensitive receptors to the north is estimated at approximately 800 feet, while the nearest residential home to the proposed Project site (i.e., within Sycamore Creek) is located approximately 1,200 feet from on-site noise generators. Based on these parameters, Project operations in the northern portions of the site would produce noise levels of approximately 62 dB at the nearest sensitive receptor, while the eastern crusher would produce noise levels of 58 dB affecting the nearest sensitive receptor. Additionally, noise levels affecting the existing residence located approximately 3,500 feet southeast of the Project site also would be well below the County's threshold of significance because this residence is located further from noise-generating activities than the nearest sensitive receptors within Sycamore Creek. Therefore, both of the proposed crusher locations are sufficiently set back from the nearest off-site sensitive receptors as to meet the daytime Riverside County noise standard of 65 dB (10-minute Leq).

However, the nocturnal (10 p.m. to 7 a.m.) noise standard of 45 dB Leq would be exceeded without consideration of terrain shielding or other propagation effects. In order to more accurately determine whether site operations would impact nearby sensitive receptors during nighttime hours, noise reduction associated with terrain shielding was considered. Under existing conditions, a break in the line of site between noise generating activities on-site and the nearest home within Sycamore Creek occurs, and measures over 80 feet in height. A similar, but smaller break occurs between noise generating activities on-site and off-site land uses to the north measuring approximately 30 feet in height. According to the Project's acoustical consultant (Hans Giroux), the effective noise reducing effect of the intervening terrain to the north is approximately 21 dB, while the noise reducing effect of intervening topography to the east is approximately 23 feet. Thus, noise levels affecting the nearest sensitive receptor to the north would be approximately 41 dB, while noise levels affecting the nearest sensitive receptor to the east would be approximately 35 dB. This level of noise is below the County's nighttime noise level standard of 45 dB Leq. Without consideration of intervening topography, the residence located approximately 3,500 feet southeast of the proposed Project site, or approximately 6,000 feet southeasterly of the nearest proposed rock crusher, also would be exposed to maximum nighttime noise levels that are below 45 dB Leq, based on the reference noise level for rock crushers (86 dB Leq at 50 feet) and the noise attenuation due to distance (i.e., reduction of 6 dB for each doubling of distance). Furthermore, the background noise level in the Project area during the quietest

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

time of night is 55 dB Leq; as such, background noise would mask any Project-related increase to the existing nighttime noise environment. New homes proposed within the Sycamore Creek Specific Plan would not be any closer than the existing homes discussed above; thus, future homes within the Sycamore Creek Specific Plan also would not be subject to significant noise impacts.

Based on the foregoing analysis, the proposed Project would not result in a substantial temporary or permanent increase in noise levels beyond those occurring without the Project; therefore, impacts would be less than significant.

c) As noted in the discussion and analysis of Issues 34.a) and 34.b), above, near- and long-term operations at the proposed Project site would not generate noise levels in excess of the standards established in the Riverside County General Plan or the County's Noise Ordinance, and impacts would be less than significant.

Off-site noise increases associated with Project-related traffic also were evaluated. According to the analysis, the proposed Project would result in a noise increase of approximately 0.7 dB along northbound segments of Temescal Canyon Road, and 0.4 dB along southbound segments of Temescal Canyon Road. The threshold of human perception of loudness differential under laboratory conditions is approximately 1.5 dB. In ambient environments, however, it is approximately 3 dB. The Project-related increase of +0.4 to +0.7 dB CNEL would therefore be essentially imperceptible. Within the context of the existing baseline noise level, such noise level increases would not conflict with the County General Plan or the County's Noise Ordinance standards. Therefore, the Project's contribution to noise levels off-site due to Project-related traffic would be less than significant.

d) The proposed Project would not involve any blasting activities, and therefore would have no potential to produce groundborne vibration or noise levels associated with such activities. Although the Project would utilize crushers as part of on-going site operations, the use of crushers on-site would not expose nearby sensitive receptors to excessive noise levels (refer also to the discussion and analysis of Issues 34.a) and 34.b)). Therefore, no impacts would occur as a result of groundborne vibration or groundborne noise levels.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

POPULATION AND HOUSING Would the project				
35. Housing				
a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d) Affect a County Redevelopment Project Area?	☐	☐	☐	☒
e) Cumulatively exceed official regional or local	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
population projections?				
f) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

Source: Project Application Materials, Riverside County GIS, General Plan Housing Element

Findings of Fact:

a & c) The proposed Project site and off-site impact areas do not contain any housing under existing conditions. Accordingly, the proposed Project would have no potential to displace housing or people, necessitating the construction of replacement housing elsewhere. Accordingly, no impact would occur.

b) The proposed Project would not create a demand for additional housing. The Project involves the continuation and expansion of an existing mining operation, and would not result in an increase in the number of people permitted to be employed on-site. The same number of people are expected to be employed by the Project as are employed by the mining operations under existing conditions. As such, the proposed Project would not create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income. No impact would occur.

d) According to Riverside County GIS, the proposed Project site and off-site impact areas are not located within or adjacent to any County Redevelopment Project Areas. Accordingly, the Project has no potential to affect a County Redevelopment Project Area, and no impact would occur.

e) The proposed Project involves the continuation and expansion of an existing mining operation, and would not result in an increase in the number of people employed on the site, as the same number of people are expected to be employed by the Project as are employed by the mining operations under existing conditions. As such, the proposed Project would have no potential to cumulatively exceed official regional or local population projections, and no impact would occur.

f) The proposed Project would involve the continuation and expansion of an existing mining operation, which would not result in or require the extension of any new infrastructure or roads. Roads and infrastructure are already in place to serve the Project. The Project also would not involve the creation of new homes or a new business. Accordingly, the Project would not induce substantial population growth, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
36. Fire Services	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Source: General Plan Safety Element

Findings of Fact: The proposed Project involves the continuation and expansion of an existing mining operation, which is provided fire protection services under existing conditions by the Riverside County Fire Department. The Project does not propose the construction of any new structures and does not propose any changes to its operational characteristics that would require an expansion of fire protection services. Accordingly, there would be no impact to fire protection services and no need to for physical alterations to fire stations to service the Project.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

37. Sheriff Services ☐ ☐ ☐ ☒

Source: General Plan

Findings of Fact: The proposed Project involves the continuation and expansion of an existing mining operation, which is provided law enforcement services under existing conditions by the Riverside Sheriff's Department. The Project does not propose any change in the scope of operations or number of employees, hours of operation, or truck traffic that would require an expansion of law enforcement. Accordingly, there would be no impact to sheriff protection services and no need for physical alterations of sheriffs' stations to service the Project.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

38. Schools ☐ ☐ ☐ ☒

Source: Riverside County GIS

Findings of Fact: The proposed Project does not involve the construction of any new homes, would not affect local demographics, and would not increase the permitted number of employees at the site. As such, there would be no increase or decrease in demand for school services resulting from Project implementation and no need for physical alterations to school facilities. No impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

39. Libraries ☐ ☐ ☐ ☒

Source: General Plan

Findings of Fact: The proposed Project does not involve the construction of any new homes, would not affect local demographics, and would not increase the permitted number of employees at the site.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

As such, there would be no increase or decrease in demand for library services resulting from Project implementation and no need for physical alterations to library facilities. No impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

40. Health Services	☐	☐	☐	☒

Source: General Plan

Findings of Fact: The proposed Project does not involve the construction of any new homes, would not affect local demographics, and would not increase the number of employees permitted at the site. As such, there would be no increase or decrease in demand for health services resulting from Project implementation and no need for physical alterations to public or private health facilities. No impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

RECREATION				
41. Parks and Recreation a) Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Is the project located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source: Riverside County GIS; Ord. No. 460, Section 10.35 (Regulating the Division of Land – Park and Recreation Fees and Dedications); Ord. No. 659 (Establishing Development Impact Fees); Parks & Open Space Department Review

Findings of Fact:

a) The proposed Project does not involve or require the construction or expansion of any recreational facilities which might have an adverse physical effect on the environment. The proposed Project does not involve the construction of any new homes, would not affect local demographics, and would not increase the number of employees permitted at the site. As such, there would be no increase or decrease in demand for recreational facilities resulting from Project implementation and no need for physical alterations to public or private recreational facilities. As such, no impact would occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

b) The proposed Project does not involve the construction of any new homes, would not affect local demographics, and would not increase the number of employees permitted at the site. As such, there would be no increase in the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated. No impact would occur.

c) The proposed Project is not located within a CSA or recreation and park district with a Community Parks and Recreation Plan, and because the Project is limited to the continuation and expansion of an existing mining operation, no Quimby fees would be required for the Project. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

42. Recreational Trails	☐	☐	☐	☒

Source: TCAP, Figure 8 (Trails and Bikeway System)

Findings of Fact: According to Figure 8 of the Temescal Canyon Area Plan, two trail segments are planned in the immediate vicinity of the Project site and off-site impact areas, including a Historic Trail along Temescal Canyon Road and a Community Trail located immediately adjacent to the eastern boundary of the Project site (SMP 139 site). However, the proposed Project does not abut Temescal Canyon Road and would not result in any new residents that would generate a demand for recreational trails. In addition, the Community Trail planned along the site's eastern boundary is accommodated within the adjacent Sycamore Creek Specific Plan. Furthermore, no recreational trails are planned as part of the Project. Accordingly, the proposed Project would not conflict with any designated trail alignments, and would not result in any significant environmental effects associated with the construction of recreational trails. As such, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

TRANSPORTATION/TRAFFIC Would the project				
43. Circulation a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Alter waterborne, rail or air traffic?	☐	☐	☐	☒
e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
f) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☒	☐
g) Cause an effect upon circulation during the project's construction?	☐	☐	☐	☒
h) Result in inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
i) Conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	☒

Source: Riverside County GIS; *Surface Mining Permit 139 R1 (Conditional Use Permit 03679) Traffic Impact Analysis.* Urban Crossroads, Inc., January 22, 2013; *2011 Riverside County Congestion Management Program.* Riverside County Transportation Commission. December 14, 2011.

Findings of Fact:

a) In order to assess the Project's potential to result in significant impacts to the surrounding circulation system, a Project-specific traffic impact analysis was conducted for the proposed Project. A copy of the Project's traffic impact analysis is provided as Appendix H to this MND. Please refer to Appendix H for a discussion of the methodologies used in the analysis of the proposed Project's impacts to traffic.

Existing Conditions

Based on the scope of the proposed Project, a study area was established encompassing a total of eleven (11) existing intersections, as shown on Figure EA-4, *Study Area and Existing Number of Through Lanes and Intersection Controls.*

In order to assess the existing conditions of the study area, AM peak hour traffic volumes were estimated by collecting count data over a two hour period from 7:00 to 9:00 AM and PM peak hour traffic volumes were identified by counting traffic volumes in the three hour period from 3:00 to 6:00 PM. Based on these existing counts, the existing level of service (LOS) for the study area intersections was calculated and is presented in Table EA-8, *Intersection Analysis for Existing (2012) Conditions*. As shown in Table EA-8, all study area intersections operate at an acceptable LOS under existing conditions, with exception of the intersection of I-15 Northbound Ramps/Indian Truck Trail, which operates at LOS F. However, and as shown in Table EA-8, with completion of the I-15 at Indian Truck Trail planned interchange improvements, this intersection would operate at an acceptable LOS D or better during both peak hours. As these improvements are currently under construction and would be in place prior to Project approval, for purposes of analysis it is assumed that all study area intersections operate at an acceptable LOS under existing conditions.