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July 22, 2014 HME-02

Mr. Jeff Harvey, Ph.D.
Harvey-Meyerhoff Consulting Group
2810 Cazadero Drive
Carlsbad, CA 92009

Subject: Biological Resources Letter Report for the Olive Pit Mine and Reclamation Project

Dear Mr. Harvey:

This letter presents the results of a biological resources technical study performed by HELIX Environmental Planning, Inc. (HELIX) for the Olive Pit Mine and Reclamation Project (proposed project) located within an approximately 190-acre property in the City of Irwindale, Los Angeles County, California.

The City of Irwindale (City) owns and maintains an inactive mining site referred to as the "Olive Pit". In partnership with the City, United Rock Products ("United Rock" or "Applicant") proposes to resume mining operations at the Olive Pit. The proposed project will occur in several phases. The first phase will include mining the eastern portion of the site, followed by reclamation of this area to create an approximate 32-acre pad suitable for future development. The second phase will include mining the remainder of the site utilizing both dry and underwater mining processes before reclaiming the area for potential use as a storm water retention/flood control basin. As required, areas impacted will be revegetated and restored with native habitat. Restored and avoided habitat will be placed in open space.

The study area for the biological resources technical study encompasses an approximately 190-acre property encompassing the Olive Pit mining site. This 190-acre area is referred to herein as the project site or site. This letter report is intended to document existing biological resources within the project site and provide an analysis of the proposed impacts in accordance with the California Environmental Quality Act (CEQA) and applicable federal, state, and local policy.

INTRODUCTION

Project Location

The project site is generally located in the southern portions of the City of Irwindale, north of Interstate 10, south of Interstate 210, east of Interstate 605, and west of State Route 39 in southeastern Los Angeles County, California (Attachment A: Figure 1). More specifically, the site occurs at the existing Olive Pit mine located to the immediate southwest of the intersection of Azusa Canyon Road and Olive Street near the address of 4800 Azusa Canyon Road (Attachment A: Figure 2). The site is depicted within Section 8 of Township 1 South, Range 10 West of the Baldwin Park, California U.S. Geological Survey (USGS) 7.5-minute quadrangle (Attachment A: Figure 3).

The project site is not located within a Significant Ecological Area (SEA) according to the Los Angeles County General Plan Update and associated maps (County of Los Angeles 2009). In addition, the site is not located within any Critical Habitat designated for federally listed species by the U.S. Fish and Wildlife Service (USFWS).

Project Description

The proposed project plans involve three components (Attachment A: Figures 4a - 4c): 1) construction of a new onsite access road; 2) phased extraction of mineral resources; and 3) site reclamation. The first operational phase at the site will include mining the eastern portion of the site, followed by reclamation of this area to create an approximately 32-acre pad suitable for future development. Reclamation will involve filling the extraction void with inert fill materials. The second operational phase will include mining the remainder of the site utilizing both dry and underwater mining processes.

General Existing Conditions

Mining at the Olive Pit began in 1925 and ceased in 1973. The site remains inactive and is in the same configuration that existed when mining ceased. The perimeter of the site remains at street level where surface elevations range from a high of 430 feet above mean sea level (AMSL) at the northeast corner of the site, to a low of 400 feet AMSL at the southwest corner. The past mining activities left steep slopes that descend into the pit up to 100 feet. The toe of the mined slopes surrounding the pit ranges from a high of 320 feet AMSL in the northeast corner, to a low of 250 feet AMSL on the western edge of the pit. The bottom of the pit is uneven and represents the extraction patterns of the previous mining activities.

General Plan

The City's General Plan land use designation for the Olive Pit is Quarry Overlay Residential Commercial. The Quarry Overlay applies to areas in the city where current or future resource extraction will take place. The underlying Residential Commercial designation indicates the land

use type, or combination of land use types, that would be implemented post-reclamation. Existing land uses within the vicinity include residential, commercial and industrial.

Zoning

The City zoning map shows the Olive Pit zoning as Agricultural (A-1). The A-1 zone is not consistent with the General Plan land use designation of the site; and therefore, the project requires a Consistency Zone Change to comply with the existing General Plan Quarry Overlay designation. The project proposal includes a request to amend the zoning to Quarry Zone (Z-1).

Mineral Resource Zone 2 Classification and Designation

Construction aggregate is the sand, gravel, and crushed rock used in all construction projects and is an essential commodity. The availability of aggregate deposits and their proximity to markets are critical factors in a region's ability to maintain and develop infrastructure. However, urban expansion has resulted in the elimination of access to areas containing available mineral resources. In an effort to protect mineral resources from expanding development, the SMARA (guidelines and statues) created the classification and designation process.

Classification of minerals is the first step in the process of identifying resources that are suitable for extraction. An area classified as a Mineral Resource Zone 2 (MRZ-2) indicates the site contains proven high quality aggregate resources. The second step in the mineral resource conservation process is to designate a site as Regionally Significant for Construction Aggregate. The purpose of designation is to identify deposits of prime importance for meeting future construction aggregate demand in the region. Designating a site as a regionally significant construction aggregate resource is designed to make the local land use authority aware of the location, mineral resource needs, and ensure their importance is considered in land-use decisions.

Resources within the Olive Pit were first classified as MRZ-2 in 1982, and were later designated as regionally significant in 1984. The area was further incorporated into the California Administrative Code as Section 3550.5 (Title 14, Div. 2, Chapter 8, Subchapter 1). To protect designated resources, SMARA Section 2763 requires a lead agency (City of Irwindale) to make certain findings prior to approving a development project that would eliminate access to, or the ability to extract, those resources. The Olive Pit project, as proposed, complies with SMARA by allowing for the extraction of regionally significant aggregate resources prior to approving development for commercial or other purposes.

Operations

Phase I Mining – Material excavated in the pit will be transported up the access road to the loading area by conveyor or off-road haul trucks and subsequently placed in overhead hoppers. Over-the-road haul trucks will be loaded at the hoppers through an automated process. Once loaded, over-the-road haul trucks will proceed approximately 3 miles to United Rock's existing Pit No. 2 located at 1245 E Arrow Highway in Irwindale. Trucks will reach this location by

exiting the site at Los Angeles Street, turning north onto Azusa Canyon, then proceeding west on Arrow Highway to Pit No. 2. From there, a conveyor will move materials to the processing plant (United Rocks Pit No. 4) which is adjacent to Pit No. 2. This proposed transport route lies entirely within the City of Irwindale and will not utilize any adjacent City's streets or State highways.

United Rock proposes to extract an average of 1 million tons per year during Phase I. Assuming 306 working days a year (6-day work week, with 6 holidays), this will result in 262 one-way truck trips a day or 131 round trips. Actual production will vary depending on market conditions.

Phase I Reclamation – Phase I reclamation will begin at the conclusion of the first mining phase. Phase II mining will occur simultaneously with Phase I reclamation. Reclamation of Phase I will include filling the area according the City's Guidelines for Above-Water and Underwater Backfilling of Open-Pit Mines. Prior to commencing fill operations, removal of disturbed and uncertified fill will occur and placement of compacted fill will be performed in a controlled manner. In addition, all fills within 40 feet of the final elevation should be compacted to a minimum of 93 percent. Backfilling of Phase I will result in an approximate 32-acre pad with a 2:1 slope along the western margin, and will require more than 8 million cubic yards of fill. All final fill slopes will be revegetated with native habitat.

Backfill material will originate from the United Rocks processing location where it is collected from various sources throughout the greater urban area, including construction demolition materials from construction projects associated with United Rock. United Rock trucks will exit the Olive Pit with a load of mined material and return loaded with material to fill the pit.

Phase II Extraction – As stated above, Phase II mining will begin after Phase I mining is completed, and will occur concurrently with Phase I reclamation. Phase II consists of the remaining 137 acres of the site and is proposed to be mined to 0 feet AMSL. A 4.7-acre pad will be developed at the base of the pit within the southwest corner of the site and will require approximately 207,600 cubic yards of fill. All fill will originate on-site. The pad will serve as a collection point for aggregates mined in Phase II. During Phase II, all resources that occur above the water table will be mined first using a front end loader or excavator. When the water table is encountered, a dredge or other method adapted for underwater mining (e.g., dragline or long reach excavator) will be used to extract materials. Phase II mining will yield about 28-million tons.

Phase II Reclamation – Phase II reclamation will commence at the conclusion of Phase II mining or when the mineable aggregate resources have been exhausted at the site. Currently, Phase II reclamation consists of utilizing the site for flood control, storm water retention and/or ground water recharge basin. Minimally, reclamation to any of the suggested end uses would involve stabilization of the mined slopes and ensuring public safety through fencing and access restrictions.

Process of Mining – Initially, material will be extracted through dry mining; thereafter, the use of a dredge or other method for extracting material below the water table will be used. At present, the majority of the pit bottom is found at or below the high water table elevation (±285 feet AMSL). The water table is known to rise and lower dependent upon season and precipitation cycles. All mining activities will be in compliance with the City of Irwindale's Guidelines for Stability Analyses of Open-Pit Mine Slopes (2003) and Drainage and Erosion Control for Open-Pit Mines (2003).

Site Access – Access onto the site will be relocated from Olive Street to the southern portion of the property along Los Angeles Street. The new access road will be constructed with a combination of on-site materials and inert fill materials from off-site sources. The access road will ascend from the bottom of the pit along the southern edge of the property to the southeastern corner of the site where it will exit at Los Angeles Street. The new access road will be constructed with a 45-foot wide road bed at a maximum grade of 8 percent. Beginning at Los Angeles Street, the first 200 feet of the access road will be paved. The remaining length of the road will be treated with dust palliatives and watered for dust control and soil stabilization.

Slope Stability – Slope stability analyses were performed for the existing perimeter slopes at the Olive Pit in January 2008. Based on the results of the static slope stability analyses, most slopes were found to be stable with a factor of safety greater than 1.5 at the property line. Seismic stability calculations indicate some over-steepened slopes near the perimeter could experience permanent deformation that would not be in compliance with the City's Guidelines for Slope Stability Analyses of Open-Pit Mines (2003) at, or beyond, the property line during an earthquake event.

Hydrology – The Olive Pit will be designed in accordance to the City of Irwindale Technical Guidelines for Drainage and Erosion Control. Currently, the Olive Pit does not receive or discharge storm water flows. All storm water is captured within the pit. Runoff from the surrounding streets and neighborhoods is intercepted and drained away from the site. All precipitation that falls on the Olive Pit is retained in the pit.

Groundwater – The Olive Pit is located in the San Gabriel Valley basin. Groundwater within this basin, underlying the City of Irwindale, flows from northeast to southwest. Historic high groundwater elevations were recorded in 1945 and have been interpolated for the Olive Pit at 330 feet AMSL. Groundwater levels in the upper San Gabriel Valley groundwater basin can fluctuate by several feet during a single year and have altered as much as 45 feet in a single season based on historical records. Historical data taken from key well 3030F, located in Baldwin Park, have shown to fluctuate over 130 feet.

Hours of Operation – Mining and reclamation activities will be conducted during the hours of 6:00AM – 6:00PM. Transportation to the processing plant will be conducted during the hours of 7:00AM – 5:00PM.

Additional Components of the Project

- A locking gate will be placed at the entrance to the site to prevent unauthorized access during non-business hours.
- An approximate 5-acre area at the entrance to the site will be used as the "loading area". The loading area will allow for storing mined materials and loading of over-the-road haul trucks. Haul trucks will access this location to be loaded with material for transport to the processing area.
- Hours of operation for the extraction of resources will occur between 6 a.m. and 6 p.m.
- Hauling of material to URPs processing plant during off peak hours 9:00 p.m. to 5:00 a.m. will be evaluated. Off hours hauling may result in less impact to the surrounding residents and level of service for Azusa Canyon Road and Arrow Highway.
- Anticipated truck traffic will be approximately 262 daily truck trips (131 out bound loads).
- All trucks shall be equipped with Diesel Particulate Filters or a resonator to reduce noise by 3 to 6 dBA. In addition, no Jake Brakes will be used.
- All trucks shall be equipped with single exhaust, vertical straight stacks and no turndown. All trucks shall be equipped with automatic transmissions, which eliminate unnecessary engine revving.
- Slopes created by mining pursuant to this plan will be a cut at a maximum 2:1 gradient.
- The use of toxic or hazardous substances is not required and will not be used on site. Petroleum products used with the operation would include diesel fuel, oil and lubricants used by mining equipment such as: excavators, loaders, dozers, draglines and haul trucks. Refueling of over-the-road trucks will be performed off-site at the URP's processing facility maintenance shop or off-site refueling station. Mining equipment will be serviced and fueled by URP mobile fuel service trucks.
- Improvement to the northern border of the Olive Pit with Olive Street. A walking park and landscape screening will be placed along the northern border of the pit to create a visual buffer between residents north of Olive Street and the Olive Pit.
- Annual production levels are expected to be approximately 1 million tons annually.

METHODS

Prior to conducting field surveys, a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity was performed. Recent and historical aerial imagery (Google 2014), topographic maps (USGS 1966), soils maps (USDA 2014), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting. In addition, a query of sensitive species and habitats databases was conducted, including the U.S. Fish and Wildlife Service (USFWS) species records (USFWS 2014), California Natural Diversity Database (CNDDB; CDFW 2014), and California Native Plant Society Electronic Inventory (CNPSEI; CNPS 2010). The complete list of sensitive species and habitats that have been previously recorded in the project vicinity was compiled and recorded locations of species and other resources were

mapped and overlaid onto aerial imagery using Geographic Information Systems (GIS). A list of sensitive species included database results for areas within approximately 5 miles of the project site were analyzed for potential to occur (Attachment D). In addition, project description information and data pertaining to the proposed project was reviewed and overlaid on recent aerial imagery (Chang Consultants 2014).

HELIX biologist Karl Osmundson conducted a general biological survey on June 6, 2014 between the hours of 0800 and 1400, which included 100 percent visual coverage of the project site and immediate vicinity. The total area surveyed for the general biological survey was approximately 210 acres, which included areas outside of the 190 acre project site. The surveys included a general inventory of existing conditions and focused primarily on verifying existing vegetation communities or habitat types, assessing suitability for sensitive plant and animal species, and identifying potential sensitive resources. Directed inspections of habitat were performed to determine the presence of potential jurisdictional waters and wetlands, as well as target rare plant species known to occur in the region. Specific attention was directed to observations, songs/calls, and evidence of sensitive animal species. Physical parameters assessed included vegetation and soil conditions, presence of indicator plant and animal species, slope, aspect and hydrology. Vegetation was mapped on 1"=200' scale aerial imagery. Materials used in the field included field binoculars, digital camera, and a Kestrel hand-held air temperature and wind speed recording device.

Pedestrian transects were performed throughout the site in order to obtain 100 percent visual coverage. Private property, steep slopes, and other areas where access was restricted or unsafe conditions were present were not walked during the survey, but were visually inspected by binocular scans. Representative photographs of the site were obtained (Attachment B). Observed or detected plant and animal species were recorded (Attachment C). Plant identifications were made in the field. Animal identifications were made in the field by visual observation or detection of calls, burrows, tracks, scat, and other animal sign.

The June 2014 survey was performed during a drought year, which is expected to have influenced the vegetation observed during the time of the survey. Animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that occur on the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

The general biological survey also included a jurisdictional assessment of the site to determine the presence or absence of water and wetland resources potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA), Regional Water Quality Control Board pursuant to Section 401 of the CWA and/or State Porter-Cologne Water Quality Control Act, and CDFW pursuant to Sections 1600 *et seq.* of the CFG Code. A formal jurisdictional delineation was not within the scope of this study.

Nomenclature for this report is taken from Holland (2008) for vegetation communities. Additional references include Hickman (1993) and Bowman *et al.* (2012) for plants, Collins and Taggart (2011) for reptiles, American Ornithologists' Union (2012) for birds, and Baker *et al.* (2003) for mammals. Plant species status is taken from the CNPS (2010). Animal species status is taken from the CDFW (2008 and 2013).

EXISTING CONDITIONS

General Land Use

The City zoning map shows the Olive Pit zoning as Agricultural (A-1). The site is an inactive mine that has gone fallow and has no active uses. General land uses surrounding the site include residential to the north; commercial, industrial, and residential to the south; industrial to the east; and residential to the west. The site is completely surrounded by developed land.

Disturbance

The entire study area contains evidence of intense disturbance from previous mining activities. Mining at the Olive Pit began in 1925 and ceased in 1973. The site remains inactive and is in the same configuration that existed when mining ceased. Evidence of ongoing anthropogenic disturbance from trespass, off-highway vehicle (OHV) activity, illegal dumping, littering, and other physical disturbance was noted throughout the site. Due to its adjacency with intense urban uses, the site is subject to regular noise, lighting, invasion by non-native exotic species, and other spillover effects. Sign of domestic pets was also observed. Natural disturbance to the site includes erosion on the steep perimeter slopes and loose gravelly soils, in addition to occasional flooding and inundation within the lower elevations of the site.

Topography and Soils

Topography of the site is generally characterized by a deep depression with steep slopes on all sides. The perimeter of the site remains at street level where surface elevations range from a high of 430 feet AMSL at the northeast corner of the site, to a low of 400 feet AMSL at the southwest corner. The past mining activities left steep slopes that descend into the pit up to 100 feet. The toe of the mined slopes surrounding the pit ranges from a high of 320 feet AMSL in the northeast corner, to a low of 250 feet AMSL on the western edge of the pit. The bottom of the pit is uneven and represents the extraction patterns of the previous mining activities. Aerial imagery suggests that the lower elevations in the pit become completely inundated presumably during higher rainfall years.

The site is mapped as supporting a single soil type according to the U.S. Department of Agriculture (USDA) Web Soil Survey (USDA 2014; Attachment A: Figure 5): Hanford gravelly sandy loam. The site is situated within granite-based alluvial river deposits consisting of coarse sands, cobbles and boulders deposited by the San Gabriel River. The soil is well-drained. The observed surface soils within the site are highly disturbed as a result of previous activities. The

steeper perimeter slopes show sign of erosion disturbance. Based on aerial imagery, the soils within the lowest elevations are apparently subjected to flood disturbance.

Vegetation Communities / Habitat Types

Vegetation communities or habitat types are classified in this report according to Holland (2008). Seven vegetation community or land use types were mapped within the project site (Attachment A: Figure 6): mule fat scrub, Diegan coastal sage scrub – disturbed, non-native grassland, Eucalyptus woodland, non-native vegetation, disturbed habitat, and developed. The existing vegetation communities are depicted on Figure 6 and summarized below within Table 1.

Table 1
EXISTING VEGETATION COMMUNITIES

VEGETATION COMMUNITY	ACREAGE
Mule Fat Scrub	1.0
Diegan Coastal Sage Scrub – Disturbed	63.6
Non-native Grassland	6.0
Eucalyptus Woodland	3.4
Non-native Vegetation	5.4
Disturbed Habitat	106.8
Developed	3.8
TOTAL	**190.0**

Mule Fat Scrub

Mule fat scrub is a stunted, shrubby scrub community dominated by mule fat (*Baccharis salicifolia*). This vegetation community typically occurs along intermittent stream channels with a fairly coarse substrate and moderate depth to the water table, but also within seasonally wet places and uplands with high moisture retention. This community may be maintained by frequent flooding, the absence of which would lead to a cottonwood or sycamore dominated riparian woodland or forest (Holland 1986). In other places, the limited hydrology may be unsuitable for anything more mesic than mule fat scrub, where the habitat occurs entirely within uplands or within transition areas between uplands and wetlands. The latter is the likely explanation for the mule fat scrub occurring on site.

A small 1.0-acre monotypic mule fat stand occurs in the southwestern portion of the site. The stand is not associated with any observed surface hydrology, but are located immediately above (upslope) of one of several depressions onsite that becomes inundated during wet years. The presence of this stand is likely a result of it being situated in some of the lowest elevations on the site and in an area immediately adjacent to a depression that holds water during wet years. The

tall, steep, north-facing slope to the immediate south of the stand likely helps to keep conditions cool and moist as well.

Diegan Coastal Sage Scrub (disturbed)

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *fasciculatum*), laurel sumac (*Malosma laurina)*, and black sage (*Salvia mellifera*).

A total of 63.6 acres of sparse and disturbed Diegan coastal sage scrub was mapped onsite. The onsite sage scrub is typical of some of the other mining pits in the local area. This habitat is most prevalent along the steep slopes along the perimeter of the site. Several peninsula features and isolated patches extend toward the central portion of the site from the perimeter slopes. These areas are of higher elevations and appear to be less disturbed from flood events and more intense mining activities, although mining disturbance is still evident.

Dominant species are California buckwheat, brittlebush (*Encelia farinosa*), and deerweed (*Lotus scoparius*). Other native species observed in relatively high numbers include California sagebrush, coyote brush (*Baccharis pilularis*), laurel sumac, and mule fat. Non-native plant species are widespread through the sage scrub onsite, including thick patches and scattered assemblages of fountain grass (*Pennisetum alopecuroides*), black mustard (*Brassica nigra*), shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), gum tree (*Eucalyptus* sp.), and tree-of-heaven (*Ailanthus altissima*), among others. Limited portions of the onsite sage scrub resemble Riversidean alluvial fan sage scrub, with small concentrations of species such as yerba santa (*Eriodictyon trichocalyx*) and scalebroom (*Lepidospartum squamatum*); however, these concentrations are not represented in large enough areas to map separately. The coastal sage scrub onsite is considered relatively low in quality based on isolation, disturbance, and prevalence of non-native species.

Non-native Grassland

Non-native grassland is a dense to sparse cover of annual grasses, often associated with non-native annual forbs. Most of the introduced annual species that comprise non-native grassland originated from the Mediterranean region of Europe, an area with a climate similar to that in California and a long history of agriculture.

Non-native grassland covers 6.0 acres onsite, primarily on the upper slopes along the southern and western boundaries of the site. Characteristic species include foxtail chess (*Bromus madritensis*) and ripgut grass (*Bromus diandrus*). Some of the patches support a prevalence of non-native broadleaf herbs, such as black mustard and yellow starthistle (*Centaurea solstitialis*). Overall, the non-native grassland onsite is considered low in habitat quality based on patch size, disturbance, and high prevalence of non-native broadleaf species that limit foraging potential for raptors.

Eucalyptus Woodland

Eucalyptus woodland is a non-native vegetation community type dominated by gum tree (*Eucalyptus* spp.). Thin stands of mature Eucalyptus woodland line the northern and western perimeter of the site. Scattered pine (*Pinus* sp.), tree-of-heaven, and other non-native trees occur throughout the woodland. A total of 3.4 acres of this woodland type was mapped onsite.

Non-native Vegetation

Non-native vegetation is a category describing stands of vegetation heavily dominated by non-native trees and shrubs (e.g., peppertree [*Schinus* sp.], oleander [*Nerium oleander*], palm [*Arecaceae* family], wattle [*Acacia* spp.], etc.), many of which are exotic and escapees from ornamental landscaping. A total of 5.4 acres of non-native vegetation dominated by tree-of-heaven, castor bean, and oleander were mapped onsite.

Disturbed Habitat

Disturbed habitat includes land cleared of vegetation, land containing a preponderance of non-native plant and disturbance-tolerant species, or land showing signs of past or present usage that removes any capability of providing viable habitat. This classification includes ruderal (weedy) areas dominated by species typical of highly disturbed sites.

Disturbed habitat is the dominant community onsite, totally 106.8 acres. The primary factor used in mapping this habitat type was evidence of intense land disturbance, either by previous mining activities, off-highway vehicle use, or occasional flood events. Surface soils in these areas are highly disturbed. There is evidence of dumping, trash, debris, and a prevalence of non-native species. Non-native species observed throughout the disturbed habitat onsite included Russian thistle, filaree (*Erodium cicutarium*), African fountain grass, yellow starthistle, mustard, and tree tobacco. Scattered, remnant, water-stressed salt cedar (*Tamarix* sp.) saplings occur within low-lying areas onsite that are presumably subject to occasional flooding. Disturbance-tolerant natives such as deerweed, California buckwheat, and mule fat are scattered throughout the disturbed habitat onsite, but not in sufficient densities to be considered a functioning native habitat type. There is one raised upland berm in the western-central portion of the site that supports a thin arrangement of several willows (*Salix* sp.) that are severely water stressed and located in an upland landscape position. The willow trees were not typical of species most

commonly seen in the region (e.g., *Salix lasiolepis*, *Salix gooddingii*) and could not be identified to species. The species is currently presumed to be a hybrid.

Developed

Developed land generally includes areas that have been permanently altered due to the construction of aboveground developments such as buildings, roads, and golf courses. For the purpose of this assessment, developed land also includes areas characterizes by isolated non-native ornamental vegetation planted for landscaping improvements. Approximately 3.8 acres of developed land is mapped as paved roads and developed facilities within the site.

General Fauna

The project site is disturbed and does not provide extensive high quality habitat for animal species. Overall animal activity during the general survey was low. Animal species observed or otherwise detected onsite included common species such as western fence lizard (*Sceloporus occidentalis*) and side-blotch lizard (*Uta stansburiana*); house finch (*Carpodacus mexicanus*), lesser goldfinch (*Spinus psaltria*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), black phoebe (*Sayornis nigricans*), common raven (*Corvus corax*), and common poorwill (*Phalaenoptilus nuttallii*); desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), domestic cat (*Felis catus*) and domestic dog (*Canis familiaris*). In addition, a single raptor species was observed at perch and soaring over the site: red-tailed hawk (*Buteo jamaicensis*). Other common species expected to occur include species such as striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*). A complete list of plant and animal species observed or otherwise detected is included as Attachment C. No rare, threatened, or endangered species were observed or otherwise detected within the site.

SENSITIVE BIOLOGICAL RESOURCES

Sensitive Natural Communities

Sensitive natural communities include land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines.

The project site supports mule fat scrub and Diegan coastal sage scrub, which are considered sensitive natural communities. Both of these communities occur as disturbed phases and are relatively low in habitat quality due to disturbance and isolation from habitat blocks in the local and regional area. The mule fat scrub onsite is monotypic and comprised almost exclusively of mule fat. It is not associated with any surface water or streambed feature, and is situated within a

shallow slope located immediately adjacent to one of several man-made depressions onsite created from mining excavations. The coastal sage scrub is highly variable in terms of species composition, with many stands being heavily dominated by California brittlebush or deerweed. Some stands are composed entirely of California buckwheat. All of the sage scrub onsite contains a high composition of non-native plants. Impacts to coastal sage scrub would be considered potentially significant and mitigation would be required. The project has been designed to minimize impacts to coastal sage scrub by avoiding and preserving the existing scrub located on the upper slopes along the perimeter of the site. Where impacts to coastal sage scrub cannot be avoided, the areas would be revegetated and preserved as part of reclamation.

The non-native grassland onsite occurs as thin patches with limited biological function and value. It is not suitable for any sensitive plant species and does not provided high quality foraging habitat for raptors. For these reasons, it is not considered sensitive and impacts would not warrant mitigation.

Special-Status Plant and Animal Species

Special-Status Plant Species

Special-status plant species are those listed as federally threatened or endangered by the USFWS; State listed as threatened or endangered or considered sensitive by the CDFW; and/or, are CNPS List 1A, 1B, or 2 species, as recognized in the CNPS's Inventory of Rare and Endangered Vascular Plants of California and consistent with the CEQA Guidelines.

A search of the USFWS, CNDDB, and CNPS species records reported in the project vicinity (within five miles) did not result in any point records for sensitive plant species on or immediately adjacent to the project site. A total of 13 species reported in the project vicinity were specifically analyzed for their potential to occur (Attachment D).

No sensitive plants were observed during the June 2014 general biological survey. The majority of the site is characterized by disturbed habitat and scattered disturbance-tolerant plants. No sensitive plant species have a high potential to occur within the project site due to lack of suitable habitat; inappropriate soil conditions; inappropriate elevations; existing disturbances; and prevalence of non-native plant species.

Special-Status Animal Species

Special-status animal species are those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and considered sensitive animals by the CDFW.

A search of the USFWS and CNDDB species records reported in the project vicinity (within five miles) did not result in any point records for sensitive animal species on or immediately adjacent the project site. A total of 12 species reported in the project vicinity were specifically analyzed for their potential to occur (Attachment D).

No sensitive animal species have a high potential to occur due to lack of suitable habitat; local and regional isolation of the site; highly urbanized areas completely surrounding the site; adjacency with existing developments; past and ongoing disturbances, including noise, lighting, illegal dumping, pedestrian use, off-highway vehicle use, and evidence of occasional flooding; and evidence of domestic pet use (i.e., cat and dog).

Nesting Birds

The project site contains trees and other vegetation that could provide suitable nesting habitat for several common bird species, including raptors. Avoidance and minimization measures are recommended to prevent impacts to nesting birds.

Jurisdictional Waters and Wetlands

In the context of this assessment, jurisdictional waters and wetlands generally include waters of the U.S., including wetlands, regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA); waters of the State regulated by the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act; and/or, streambed and riparian habitat regulated by the CDFW pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code).

The site is a closed system and does not receive waters from natural drainage features offsite or discharge waters into offsite features. No natural drainage features, streambed, or stands of functioning riparian habitat occur on the project site. No portions of the site indicate drainage patterns or surface flow through an ordinary high water mark (OHWM). No streambed features and no functioning riparian habitat were evident during the 2014 general biological survey. The site does not abut or occur adjacent to any natural drainage features. The site is situated over 0.5 mile from Santa Fe Dam to the north and over 1.0 mile from the channelized reach of the San Gabriel River to the west. There are a few storm drain outlets and pipes that apparently discharge storm water onto the site from the adjacent urban areas and the City's storm drain system.

The site is depauperate and lacks resources typical of riparian habitats in the region. The few willow trees onsite are situated up on top of a manufactured berm within an upland landscape position and amongst the disturbed habitat onsite. The trees are severely water stressed and not associated with any surface drainage feature, streambed, or basin. The individual trees do not constitute a functioning stand of riparian habitat and do not provide high value to wildlife resources.

The mule fat scrub onsite is not associated with any surface water or streambed feature. It is situated within a shallow slope located immediately south and southwest of the lowest of several man-made depressions onsite created from mining excavations. The depression adjacent to the mule fat stand is presumably closest to the water table and where water collects and stays inundated or saturated the longest at the surface. Mule fat occurs scattered throughout the project

site, from areas located up on the top of perimeter slopes, on slope faces, and down at the bottom of slopes and within the pit floor. In the Arid West region, mule fat is considered a facultative (FAC) species, which means that it is equally likely to occur in wetlands or non-wetlands (estimated probability 34% – 66%). As such, its presence alone does not indicate a true upland or wetland position on the site. Although a formal jurisdictional delineation was not performed for this study, it is entirely possible that the depression underlying the stand of mule fat scrub supports wetland conditions for at least a portion of the year.

Aerial imagery suggests that the depression adjacent to the stand of mule fat has the ability to hold standing water, likely depending on the amount of precipitation received, groundwater recharge, and depth to water table during the winter. The imagery also suggests that other low-elevation spots within the pit appear to become inundated as well. The depressions are acknowledged on the USFWS National Wetlands Inventory as three distinct basins. These depressions are man-made and isolated, with no apparent surface water features draining into them. The underlying soils are gravel and sand. There is no indication of an underlying hardpan. Percolation rates are expected to be high. Depth and duration of standing water is likely largely dependent on groundwater recharge and depth to water table. Given the information available for this study, it can be concluded that the depressions on the site are man-made features that have the ability to hold water during a portion of the year. The features are not natural and do not support a dominance of wetland or riparian vegetation. These same attributes are characteristic of the many other mining pits in the local area. For the reasons stated above, the features are not considered to be jurisdictional, including isolated waters of the State subject to RWQCB jurisdiction pursuant to the State Porter-Cologne Water Quality Control Act.

Wildlife Corridors and Linkages

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plant materials and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine and life history. For example, animals can use these corridors to travel between their riparian breeding habitats and their upland burrowing habitats. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance.

No wildlife corridors or linkages occur on or in the immediate vicinity of the site. The project site is surrounded on all sides by highly urbanized land. It is locally and regionally isolated and separated from undeveloped land by expansive development. The site does not support habitat that would contribute substantially to the assembly and function of any local or regional wildlife corridors or linkages. The habitat that exists is relatively low in quality and is disconnected and

isolated from better quality habitat in the local and regional area. The site is completely enclosed with perimeter fencing. Animal species that require direct or less-constrained habitat connectivity along their travel routes would be challenged to find access to the habitat within the site and immediate vicinity.

The project site is likely used by common resident and migratory birds with the ability to fly over long distances. Due to the site's isolation and the fact there are no additional undeveloped parcels or habitat fragments in the local area, it does not function as a stepping-stone linkage and is not part of an archipelago chain of small open space patches amongst the urbanized area. Special-status birds, such as the federally threatened coastal California gnatcatcher (*Polioptila californica californica*), would not be expected to move onto the site from undeveloped land in the region due to the distance they would have to travel over urbanized land that is highly disturbed and provides little to no vegetative cover. Based on observations of coastal California gnatcatchers in a variety of natural and non-natural habitats, it is expected that they may disperse across marginal habitats such as agriculture, disturbed habitats (e.g., fallow fields, abandoned vineyards) and non-native grasslands and are capable of moving across roadways (Riverside County 2003). The closest undeveloped land is within the Santa Fe Dam Recreation Area (i.e., Santa Fe Dam Regional Park, Santa Fe Flood Control Basin) located approximately 0.65 mile north of the site. The CNDDB reports a gnatcatcher record from 2007 near the Nature Center within the Regional Park. The site is separated from this area by highly urbanized land associated with residential neighborhoods of Baldwin Park. Gnatcatchers would not be expected to overland disperse through the highly urbanized area that separates the site from the Santa Fe Regional Park.

Therefore, the project site does not support habitat that would contribute substantially to the assembly and function of any local or regional wildlife corridors or linkages, including those for special-status birds such as the coastal California gnatcatcher.

REGULATORY SETTING

Activities affecting the biological resources determined to exist or have the potential to exist within the project site would be subject to the federal, State, and local regulations discussed below.

Federal

Federal Endangered Species Act

The Federal Endangered Species Act (ESA) (7 United States Code (USC) 136; 16 USC 460 et seq. [1973]) extends legal protection to plants and animals, listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS), and gives authorization to the USFWS to review proposed federal actions to assess potential impacts to species listed as endangered or threatened. The ESA generally prohibits the "taking" of a federally listed species. "Taking" of a threatened or endangered species is deemed to occur when an intentional or negligent act or

omission results in any of the following actions: “to harass, harm, pursue, hunt, shoot, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Such acts may include significant habitat modification or degradation if it results in death or injury. Likewise, import, export, interstate, and foreign commerce of listed species are all prohibited. Sections 7 and 10 of the ESA permit “incidental take” of a listed species via a federal or private action, respectively, through formal consultation with the USFWS. In lieu of a separate Section10a Permit, an applicant may be included in a local Habitat Conservation Plan (HCP).

Clean Water Act

The Federal Water Pollution Control Act, more commonly known as the Clean Water Act (CWA) (33 USC ss/1251 et seq. [1977]), establishes the basic structure for regulating discharges of pollutants into the waters of the United States and is the primary regulatory body affecting wetlands. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters. The CWA gives the United States Environmental Protection Agency (USEPA) authority to implement pollution control programs, set water quality standards for all contaminants in surface waters, and to address nonpoint source pollution. The CWA makes it illegal for any person to discharge pollutants into navigable waters, unless a permit is first obtained.

Section 404 of the CWA regulates the discharge of dredged or fill material into navigable waters and defines standards under which these types of activities may be permitted.

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA) as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

State

California Endangered Species Act

Similar to the federal ESA, the California Endangered Species Act (CESA) along with the Native Plant Protection Act authorizes the CDFW to designate, protect, and regulate the taking of special-status species in the State of California. Special-status species are those designated by the State as endangered, threatened or species of concern. CESA defines endangered as those species whose continued existence in California is jeopardized. State-listed threatened species are those not presently threatened with extinction, but which may become endangered if their environments change or deteriorate. Most “species of concern,” are species whose breeding populations in California may face local extirpation. To avoid the future need to list these species

as endangered or threatened, the CDFW recommends consideration of these species, which do not as yet have any legal status, during analysis of the impacts of proposed projects.

California Fish and Game Code

The CFG Code regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the State. It includes CESA (Sections 2050-2115), Native Plant Protection Act (Sections 1900 *et seq.*), and Streambed Alteration Agreement regulations (Sections 1600-1616), as well as provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife. The CFG Code also includes protection of birds (Sections 3500 *et seq.*) and the California Native Plant Protection Act (NPPA) of 1977 (Sections 1900-1913), which directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State."

Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto. Raptors (birds of prey) and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. In common practice, CDFW places timing restrictions on clearing of potential nesting habitat (e.g., vegetation), as well as restrictions on disturbances allowed near active raptor nests.

California Environmental Quality Act (CEQA)

Primary environmental legislation in California is found in the CEQA and its implementing guidelines (State CEQA Guidelines), requiring that projects with potential adverse effects or impacts on the environment undergo environmental review. Adverse impacts to the environment are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in ESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. CEQA Guideline Section 15380(d) allows a public agency to undertake a review to determine if a significant effect would occur on species that have not yet been listed by either the USFWS or CDFG (i.e., species of concern). Thus, if warranted under special circumstances, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as formally protected.

Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be

present in the project area and determine whether the proposed project will have a potentially significant impact on such species.

Local

City of Irwindale General Plan – Resource Management Element Policies

The Irwindale General Plan will serve as the blueprint for future planning and development in the City. The General Plan indicates the City‘s vision for the future through the policies and plans that are designed to shape the physical development of the community. The General Plan acknowledges the City‘s previous planning efforts, the established land use patterns in the community, and adopted development policy. The City‘s history and development patterns have been shaped, in large measure, by the numerous quarries that have historically operated in the City. The primary issue that is addressed in this General Plan is how these areas will be used in the coming decades. This General Plan establishes patterns of land use and development that promotes the maintenance of the established residential neighborhoods, while at the same time, accommodating future growth. The Resource Management Element of the General Plan indicates the City's policies concerning the conservation and preservation of important natural and man-made resources. This element complies with the State requirements for a conservation element and an open space element. The scope of this element has also been expanded to consider issues related to mining and parks and recreation.

Resource Management Element Policies

The policies included in this element focus on the following three major issue areas: The City‘s commitment to the maintenance and management of natural resources; The City‘s commitment in maintaining and enhancing open space in the City that may be used for resource preservation and/or recreation; and, The City‘s continued commitment in maintaining those amenities, both natural and man-made, that contributes to the livability of the site.

Issue Area – Natural Resources
The City will continue to cooperate in the maintenance and conservation of the area‘s natural resources.

Issue Area – Open Space Resources
The City will strive to enhance the recreational and open space resources for the benefit and enjoyment of the existing and future residents.

Issue Area – Resource Preservation
The City will maintain and preserve those natural and man-made amenities that contribute to the City‘s livability.

Issue Area – Mining and Reclamation

The City will improve environmental compliance, reclamation planning, and long-term economic improvement of the mines and quarries (inactive, active, and reclaimed) in Irwindale.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

This section provides a project-level biological resources impact analysis for the proposed project in support of environmental review. The issues addressed in this section are derived from Appendix G of the CEQA Guidelines. Mitigation, monitoring, and reporting requirements to eliminate or reduce project impacts to a less than significant level are also provided in this section.

Issue 1: Special-Status Species

Would the project 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 CDFW or USFWS?

Issue 1 Impact Analysis

Less than Significant Impact with Mitigation. No sensitive plants were observed during the June 2014 general biological survey. The majority of the site is characterized by disturbed habitat and scattered disturbance-tolerant plants. None of the sensitive plant species reported in the project vicinity have a high potential to occur within the project site due to lack of suitable habitat; inappropriate soil conditions; inappropriate elevations; existing disturbances; and prevalence of non-native plant species (Attachment D). No significant impacts to sensitive plant species are expected.

None of the sensitive animal species reported to the project vicinity have a high potential to occur due to lack of suitable habitat; local and regional isolation of the site; highly urbanized areas completely surrounding the site; adjacency with existing developments; past and ongoing disturbances, including noise, lighting, illegal dumping, pedestrian use, off-highway vehicle use, and evidence of occasional flooding; and evidence of domestic cat and dog use (Attachment D). No significant impacts to sensitive animal species are expected.

The project site contains trees, shrubs, and other vegetation that provide suitable nesting habitat for common birds, including raptors, protected under the MBTA and CFG Code. Construction of the proposed project could result in the removal or trimming of trees and other vegetation during the general bird nesting season (January 15 through September 15) and, therefore, could result in impacts to nesting birds in violation of the MBTA and CFG Code. Direct impacts could occur as a result of removal of vegetation supporting an active nest. Impacts would be considered significant.

Implementation of mitigation measure BIO-1 below would reduce potentially significant impacts on special-status animal species and their habitat, including nesting birds and raptors, to less than significant levels.

Issue 1 Mitigation Measures

Implementation of mitigation measure BIO-1 would ensure that potential impacts to nesting birds protected under the MBTA and CFG Code, including raptors, are avoided during project construction.

BIO-1 Avoidance of Nesting Birds and Raptors. The project applicant shall require that initial grading and vegetation activities (i.e., earthwork, clearing, and grubbing) for Phase I and Phase II are performed outside of the general breeding season for migratory birds and raptors, which is defined as occurring between January 15 and September 15. If activities must occur during the general bird breeding season, the project applicant shall retain a qualified biologist to perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the Migratory Bird Treaty Act and California Fish and Game Code. The pre-construction survey shall be performed no more than seven days prior to the commencement of the activities. If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no impacts shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, as determined by the qualified biologist.

Issue 2: Sensitive Natural Communities

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

Issue 2 Impact Analysis

Less than Significant Impact with Mitigation. Two sensitive natural communities were mapped within the project site: mule fat scrub and Diegan coastal sage scrub. Mule fat scrub has a global sensitivity ranking of G4 and a State sensitivity ranking of S4 (i.e., this community is apparently secure and there are greater than 100 viable occurrences and/or greater than 50,000 acres statewide and worldwide). Diegan coastal sage scrub has a global sensitivity ranking of G3 and a State sensitivity ranking of S3 (i.e., this community is vulnerable and there are 21-100 viable occurrences and/or 10,000-50,000 acres statewide and worldwide).

The onsite mule fat scrub and coastal sage scrub represents native habitat that has re-established onsite since mining activities ceased. These communities are highly disturbed and provide

limited biological function and value. Neither have a high potential to support any sensitive species. The mule fat scrub is not associated with any functioning riparian habitat and is of low quality. The Diegan coastal sage scrub is highly disturbed, low in quality, and isolated from core habitat blocks in the local and regional area. Nevertheless, the communities are considered sensitive and impacts would be considered significant.

Non-native grassland has a sensitivity ranking of G4S4. This habitat type is generally considered sensitive when it provides suitable or occupied habitat for sensitive animals, and/or when it provides high quality foraging habitat for raptors. The non-native grassland onsite is confined to thin, linear patches that do not provide suitable habitat for sensitive species and do not provide good quality raptor foraging habitat. Therefore, the non-native grassland onsite is not considered to be a sensitive natural community. Impacts to this community would be considered less than significant.

The project impacts to sensitive natural communities and proposed conceptual open space and restoration areas are depicted within Figures 7 and 8 and summarized below within Table 2.

Table 2
IMPACTS TO VEGETATION COMMUNITIES AND PROPOSED MITIGATION

Vegetation Community	Existing*	Impacts*	Mitigation			
			Ratio	Avoided / Preserved	Restored / Preserved	Total
Mule Fat Scrub	1.0	1.0	1:1	-	1.0	1.0
Diegan Coastal Sage Scrub – Disturbed	63.6	45.6	1:1	18.0	47.8	65.8
TOTAL	**64.6**	**46.6**	**-**	**18.0**	**48.8**	**66.8**

*Areas are presented in acre(s) rounded to the nearest 0.1

The project would impact 1.0 acre of mule fat scrub and 45.6 acres of coastal sage scrub. The project would avoid 18.0 acres of Diegan coastal sage scrub, which would be placed in open space. Consistent with the reclamation plan requirements, the project would restore impact areas onsite through the establishment of 2:1 slopes and revegetation of the slopes with native habitat, to include a minimum of 1.0 acre of mule fat scrub and 47.8 acres of Diegan coastal sage scrub. The restored areas would also be placed in open space.

Implementation of the compensatory mitigation in BIO-2 below would reduce potentially significant impacts on sensitive natural communities to less than significant levels.

Issue 2 Mitigation Measures

Implementation of mitigation measure BIO-2 would ensure that impacts to sensitive natural communities are fully compensated.

BIO-2 Habitat Mitigation. The project applicant shall compensate the loss of 1.0 acre of mule fat scrub through onsite restoration and preservation, which shall be provided in-kind and at a 1:1 ratio for a minimum of 1.0 acre of restored mule fat scrub preserved onsite. The project applicant shall further compensate the loss of 45.6 acres of Diegan coastal sage scrub through onsite restoration and preservation, which shall be provided in-kind and at a 1:1 ratio for a total of 18.0 acres of avoided coastal sage scrub preserved onsite and a minimum of 27.6 acres of restored coastal sage scrub preserved onsite. Areas preserved onsite shall be designated as open space and placed within a protective easement for conservation purposes, such as a restrictive covenant or conservation easement. Signage and fencing shall be provided at perimeter locations.

The project applicant shall retain a qualified biologist to prepare a restoration plan, to be approved by the City, which shall include the following:

a. All final specifications and topographic-based grading (with 10-foot contours), planting, and irrigation plans (if irrigation is used). All restoration sites shall be prepared for planting by decompacting the top soil in a way that mimics natural top soil to the maximum extent practicable while maintaining slope stability. Topsoil and plant materials salvaged from avoided habitat areas onsite shall be transplanted to and/or used as a seed/cutting source for the restoration areas to the maximum extent practicable as approved by the City. Planting and irrigation shall not be installed until the City has approved site grading. All plantings shall be installed in a way that mimics natural plant distribution, and not in rows;

b. Planting palettes (plant species, size, and number/acre) and seed mix (plant species and pounds/acre). The plant palette proposed in the plan shall include native species specifically associated with the habitat type(s). Unless otherwise approved by the City, only locally native species (no cultivars) obtained from as close to the project site as possible shall be used. The source and proof of local origin of all plant material and seed shall be provided;

c. Container plant survival shall be 80 percent of the initial plantings for the first 5 years. At the first and second anniversary of plant installation, all dead plants shall be replaced unless their function has been replaced by natural recruitment;

d. A final implementation schedule that indicates when all native habitat impacts, as well as restoration grading, planting, and irrigation, will begin and end. Necessary site preparation and planting shall be completed during the concurrent or next planting season (i.e., late fall to early spring) after City approval of grading. In the event that

the project applicant is wholly or partly prevented from performing obligations under the final plans (causing temporal losses due to delays) because of unforeseeable circumstances or causes beyond the reasonable control, and without the fault of negligence of the project applicant, including but not limited to natural disasters (e.g., earthquakes, etc.), labor disputes, sudden actions of the elements (e.g., further landslide activity), or actions or inaction by federal or state agencies, or other governments, the project applicant will be excused by such unforeseeable cause(s);

e. Five years of success criteria for restoration areas, including: a total of 40-65 percent absolute cover; evidence of natural recruitment of multiple species; 0 percent coverage for Cal-IPC List A and B species, and no more than 10 percent coverage for other exotic/weed species;

f. A qualitative and quantitative vegetation monitoring plan with a map of proposed sampling locations. Photo points shall be used for qualitative monitoring and stratified, random sampling shall be used for all quantitative;

g. Contingency measures in the event of creation failure;

h. Annual mitigation maintenance and monitoring reports shall be submitted to the City after the maintenance and monitoring period and no later than December 1 of each year.

Issue 3: Wetlands

Would the project have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?

Issue 3 Impact Analysis

No Impact. The project site has no direct contact with federally protected wetlands. The site is generally self-contained and does not receive or discharge waters to the San Gabriel River, the Santa Fe Flood Control Basin, or any other surface water bodies or drainage features nearby. No potential jurisdictional waters and wetlands were identified during the general biological survey. Lower elevations onsite are characterized by depressions and imprints in the land that were created by previous mining activities. The depressions have the potential to become inundated and hold water during wet years. There is no evidence that an underlying hard pan exists and the depressions are not considered to be vernal pools. Therefore, no federally protected wetlands will be affected by the project and no mitigation is required.

Issue 3 Mitigation Measures

No mitigation is required.

Issue 4: Wildlife Movement and Nursery Sites

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

Issue 4 Impact Analysis

Less than Significant Impact. No wildlife corridors or linkages occur on or in the immediate vicinity of the site. The project site does not support habitat that would contribute substantially to the assembly and function of any local or regional wildlife corridors or linkages. The project site is surrounded on all sides by highly urbanized land. It is locally and regionally isolated and separated from undeveloped land by expansive development. The habitat that exists is relatively low in quality and is disconnected and isolated from better quality habitat in the local and regional area. The site is completely enclosed with perimeter fencing. Animal species that require direct or less-constrained habitat connectivity along their travel routes would be challenged to find access to the habitat within the site and immediate vicinity. Due to the site's isolation and the fact there are no additional undeveloped parcels or habitat fragments in the local area, it does not function as a stepping-stone linkage and is not part of an archipelago chain of small open space patches amongst the urbanized area. The closest undeveloped land is within the Santa Fe Dam Recreation Area (i.e., Santa Fe Dam Regional Park, Santa Fe Flood Control Basin) located approximately 0.65 mile north of the site. The site is separated from this area by highly urbanized land associated with residential neighborhoods of Baldwin Park. Wildlife, including special-status birds such as the coastal California gnatcatcher, would not be expected to overland disperse through the highly urbanized area that separates the site from the Santa Fe Dam Regional Park. At best, the project site is used as temporary or live-in habitat by common resident and migratory birds with the ability to fly over long distances. Impacts to wildlife movement and nursery site would be less than significant and no mitigation is required.

Issue 4 Mitigation Measures

No mitigation is required.

Issue 5: Local Policies, Ordinances, and Adopted Plans

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Issue 5 Impact Analysis

No Impact. The project would not conflict with any local policies or ordinances protecting biological resources. The project does not occur within a designated SEA and would not conflict with any County of Los Angeles policies or ordinances. No impact would occur.

The City's General Plan includes several resource management element policies that relate to the project. The project would be consistent with the natural resources issue area policies in that it will maintain and conserve existing natural resources on the site through onsite preservation and restoration measures. The project would be consistent with the open space resources issue area policies by enhancing open space resources onsite. The project would be consistent with the resource preservation issue area policies in that it will maintain and preserve native habitat onsite. The project would be consistent with the mining and reclamation issue area policies as they relate to biological resources in that it will implement environmental compliance measures and a reclamation plan, and is an example of providing long-term economic benefit of the mines and quarries in the City. Therefore, the project would not conflict with any City policies or ordinances and no impact would occur.

Issue 5 Mitigation Measures

No mitigation is required.

Issue 6: Adopted Conservation Plans

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

Issue 6 Impact Analysis

No Impact. The project site is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. The project would not conflict with such plans and no impact would occur.

Issue 6 Mitigation Measures

No mitigation is required.

We appreciate the opportunity to provide you with this letter report. Please do not hesitate to contact me at (619) 462-1515 or KarlO@helixepi.com if you have any questions or require further assistance.

Sincerely,

Karl Osmundson
Biology Group Manager

Enclosures:
Attachment A – Figures 1 through 8
Attachment B – Site Photographs
Attachment C – Plant and Animal Species Observed or Detected
Attachment D – Sensitive Species Potential to Occur Tables
Attachment E – Explanation of Status Codes for Sensitive Plant and Animal Species

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