## IV. ENVIRONMENTAL IMPACT ANALYSIS H. MINERAL RESOURCES

## **1.0 INTRODUCTION**

This section addresses the potential impacts of the Proposed Project on mineral resources (i.e., sand, gravel and petroleum). The analysis describes the regulatory setting and the existing physical conditions of the Proposed Project site as related to such mineral resources. Impacts are addressed in terms of whether implementation of the Proposed Project would result in the permanent loss of, or loss of access to, any such resources occurring within the Proposed Project site.

The analysis addresses the impacts that would occur for the Project as Proposed, for the Project's Equivalency Program, and for the Project's secondary impacts that would occur from the implementation of the Project's off-site mitigation measures.

## 2.0 ENVIRONMENTAL SETTING

#### 2.1 Regulatory Framework

Regulations related to the issue of mineral resources include restrictions on the depletion of minerals located in significant quantities (termed Mineral Resource Zones, designated by the California Geological Survey (CGS)).

#### 2.2 Existing Conditions

#### 2.2.1 Regional Conditions

Mineral Resource Zone areas containing notable sand and gravel deposits are not located in, or near the Proposed Project site.

#### 2.2.2 Local Conditions

The geologic makeup at the Proposed Project site consists of fill, alluvium, and San Pedro Formation. The fill soils contain primarily silt, clay, and sand and range in thickness depending on location. Beneath the fill, recent age alluvium ranges from 40 to 120 feet thick. The upper portion of alluvium consists of soft silty clay and clay with layers of silt and sand. The middle portion consists of clay and silt. The bottom section of alluvium is characterized by sand and gravel. The San Pedro Formation, the Lower (older) Pleistocene deposition that underlies the fill and alluvium, is approximately 300 feet thick and consists of sand and gravel along with beds of silty sand and silt. The upper 100 to 280 feet of the formation is waterbearing and is known as the Silverado Aquifer, one of the major groundwater aquifers of the Los Angeles Basin. Approximately 6,500 feet of Tertiary age sedimentary rocks underlie the San Pedro Formation. A more detailed discussion of geologic materials can be found in Subsection 2.0, Environmental Setting, of Section IV.A, Earth, in this EIR.

Although some sand and gravel is found within the geologic materials below the Proposed Project site, the area has not been recognized as having a significant potential for mineral extraction, and is not designated a Mineral Resource Zone by the CDMG (map is included as Appendix I).<sup>258</sup> Furthermore, the City of Los Angeles General Plan Framework EIR indicates that significant sand and gravel resources are not present on the Proposed Project site.

Historically, oil extraction has occurred near the Proposed Project site. However, petroleum resources (i.e., fossil fuels) beneath the Proposed Project site, if any, are not known to be substantial.<sup>259</sup>

#### 3.0 IMPACT ANALYSIS

#### 3.1 Methodology

Existing information sources were reviewed to determine whether any portions of the Proposed Project site contain significant mineral resources and to evaluate how these resources, if any, would be affected by the Proposed Project.

#### **3.2 Significance Thresholds**

The Draft Los Angeles CEQA Thresholds Guide (p. C.4-2) states that the determination of significance for mineral resources shall be made on a case-by-case basis, considering the following factors:

<sup>&</sup>lt;sup>258</sup> California Department of Conservation, Division of Mines and Geology, <u>Aggregate Resources in the</u> <u>Los Angeles Metropolitan Area 1999</u>, Miscellaneous Map No. 010.

<sup>&</sup>lt;sup>259</sup> Curtis, David, Environmental Engineer, California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, personal communication, comment letter re: "Notice of Preparation (NOP) for the Village at Playa Vista, ENV-2002-6129-EIR, Los Angeles County," November 19, 2002.

- Whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a mineral resource that is located in a MRZ-2 area or other known or potential mineral resource area; and
- Whether the mineral resource is of regional or statewide significance, or is noted in the Conservation Element as being of local importance.

Based on these factors the Proposed Project would have a significant impact if:

• The Project would result in the permanent loss of, or loss of access to, a mineral resource that is located in a MRZ-2 area or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance.

#### **3.3 Project Design Features**

Because no significant mineral resources are present at the Proposed Project site, there are no Project Design Features specific to mineral resources.

## 3.4 Project Impacts

The Draft Los Angeles CEQA Thresholds Guide identifies two factors to be used for determining the significance of a project's impacts on mineral resources (see Subsection 3.2, above). The first factor has been established as the Proposed Project's significance threshold. The second factor focuses on resources that are of regional or statewide significance. As the established threshold applies to all resources, including those of regional or statewide significance, the second factor is addressed within the following discussion of impacts on mineral resources.

As discussed in Subsection 2.0, Environmental Setting, the Proposed Project is not located in a MRZ-2 area or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance, and would not result in loss of access to any such mineral resource area. As such, a less-than-significant impact would occur based on the fact that implementation of the Proposed Project would not result in permanent loss of, or loss of access to, a mineral resource that is located within a MRZ-2 area or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance.

Construction of uses proposed to occur within the Urban Development Component would require the use of mineral resources such as sand and gravel, as well as various refined forms of petroleum resources, such as gasoline and diesel fuels. Inasmuch as the construction of the Urban Development Component would require mineral resources from off-site areas, the Proposed Project would result in the reduction of mineral resources supplies on a regional basis. However, based on the incremental demand that a typical construction project similar to the Proposed Project in size and intensity would create, it is anticipated that the mineral construction material and petroleum fuel requirements for this component of the Proposed Project would not result in a substantial reduction in available supplies relative to demand. Additionally, the Proposed Project includes Project Design Features, (see Subsection 3.3 of Sections IV.A, Earth, and IV.M, Energy) such as the Residential Sustainable Performance Guidelines (Appendix M-1 of this EIR) that serve to reduce the consumption of such mineral resources. The Proposed Project would not result in the permanent loss of, or loss of access to, a mineral resource area, including those noted in the Conservation Element as being of local importance. As such, a less-than-significant impact is anticipated relative to mineral resources.

In summary, implementation of the Proposed Project would not result in a significant impact to a MRZ-2 area, or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance, since no such areas occur at, or near, the Proposed Project site.

## **3.5 Equivalency Program Impacts**

The preceding mineral resources analysis addressed impacts associated with construction and operation of the Proposed Project. The proposed Equivalency Program allows for specific limited exchanges in the types of land uses occurring within the Project's Urban Development Component. No changes are proposed under the Equivalency Program to the Project's Habitat Creation/Restoration Component.

The exchange of office uses for retail and/or assisted living units would be accomplished within the same building parameters, and would occur at relatively limited locations within the Project site. Furthermore, under the Equivalency Program, there would be no substantial variation in the Project's street configurations, building pad elevations, or the depth of excavation. Very minor variations regarding foundation types or in the preparation of landscaping areas could occur, however such variation would be within the range of construction procedures anticipated to occur with the Proposed Project. None of these variations in land use configurations would affect any designated mineral resources on- or off-site, as the Equivalency Program would be implemented within the Proposed Project site, which contains no such Implementation of the Equivalency Program would therefore not result in the resources. permanent loss of, or loss of access to, a mineral resource that is located in a MRZ-2 area or other known or potential mineral resource area, including those noted in the City General Plan Conservation Element as being of local importance. Consequently, mineral resources impacts attributable to the Equivalency Program, as is the case with the Proposed Project, would be less than significant.

## **3.6 Impacts of Off-Site Improvements**

Proposed Project development could result in secondary impacts arising from implementation of the Project's mitigation measures, as well as the direct impacts described above. Mitigation measures within Section IV.K.(1), Traffic and Circulation, require physical improvements in transportation facilities at numerous locations including roadway widening at seven locations, as described in Subsection 5.8 of that Section. In addition, as discussed in Section IV.N.(1), Water Consumption, the Proposed Project would require the construction of a water regulator station in the vicinity of Jefferson Boulevard and Mesmer Avenue. These off-site improvements are all located in developed urban areas. All of the off-site improvements, with the exception of the water regulator station, would occur within, or adjacent to, existing roadways. The water regulator station includes a small amount of above-ground piping equipment, a common element of the urban environment. Implementation of the Project's mitigation measures does not involve the construction of any buildings.

While the construction of the proposed improvements would require the use of various mineral resources (e.g., sand, gravel, and concrete/asphalt for roadbeds, paving, and footings), none of the proposed improvement areas contain known mineral resources, and none are delineated on local plans as containing important mineral resources. As such, the proposed improvements would not result in the permanent loss of, or loss of access to, a mineral resource that is located in a MRZ-2 area or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance. No impacts to regional or locally important mineral resource supplies would occur.

# 4.0 MITIGATION MEASURES

No significant impacts are expected relative to mineral resources; hence, no mitigation measures are required for the Proposed Project, inclusive of the Equivalency Program and off-site improvements.

# 5.0 UNAVOIDABLE ADVERSE IMPACTS

Implementation of the Proposed Project, inclusive of the Project's Equivalency Program and off-site improvements, would not result in any significant impacts relative to mineral resources. The Proposed Project would not result in the permanent loss of, or loss of access to, a mineral resource that is located in a MRZ-2 area, or other known or potential mineral resource area, including those noted in the Conservation Element as being of local importance. Therefore, no mitigation measures are required.

#### 6.0 CUMULATIVE IMPACTS

Based on the fact that there are no MRZ-2 areas, or other known or potential mineral resource areas, including those noted in the Conservation Element as being of local importance in or near the Proposed Project site, implementation of the Proposed Project, including the Project's Equivalency Program and off-site improvements, in conjunction with all related projects would not result in a permanent loss of, or loss of access to, mineral resources within such areas.

With respect to off-site mineral resources (e.g., sand and gravel, and petroleum), the consumption of such resources for the construction of other projects in the local vicinity is expected to be typical of new development, as provided for by the building materials and transportation fuels industries. The consumption of natural resources associated with the Proposed Project is relatively small, compared to the overall amount of resources that the market provides.

Overall, the Proposed Project in conjunction with the related projects is not anticipated to have a significant cumulative impact to a mineral resource that is located in a MRZ-2 area, or other known or potential mineral resource area and there are no mineral resources at or near the Proposed Project site that are noted in the Conservation Element as being of local importance.