# **CHAPTER 3**

# Environmental Setting, Impacts, and Mitigation Measures

# **Introduction to Environmental Analysis**

The following sections (Sections 3.1 through 3.12) of this Draft EIR provide a discussion of the environmental setting at the time of NOP issuance; potential environmental impacts associated with the Proposed Project, and proposed mitigation measures for the Proposed Project. In cases where no mitigation is required, this fact is noted. The potential cumulative effects of implementing the Proposed Project are further discussed at the end of each resource section.

## 3.1 Aesthetics

This section identifies the setting, regulatory context, and potential environmental impacts to aesthetic (visual) resources. This evaluation focuses on the physical changes associated with the addition of proposed facilities and structures. The criteria and methodology used to determine significance is discussed, as well as all potential impacts associated with the Proposed Project.

# 3.1.1 Environmental Setting

The Proposed Project is located within the City of Vacaville, Solano County, California. Prominent scenic resources within this area include a series of foothills associated with the Vaca Mountains. Foothills are located west and southwest of the Proposed Project site. Major roadways and highways in the vicinity of the Proposed Project site include I-505, I-80, and East Monte Vista Avenue, which are all located to the east. Surrounding land uses in the vicinity of the Proposed Project site consist of commercial uses to the south, open space to the west, industrial land uses to the north, and office uses to the east. **Figure 3.1-1** provides various photos from the project site.

The project site itself consists of 286 acres of land owned and occupied by Solano County and comprises the Nut Tree Airport (Airport) (approximately 262 acres), County Airport Road, and an undeveloped parcel located southwest of the Putah South Canal. The majority of the Airport is developed and consists of a single northeast-to-southwest oriented runway, aircraft parking apron, hangars, administration building, parking lots, fuel storage and maintenance facilities, and associated operations facilities. Elevation of the study area ranges between 100 and 120 feet above mean sea level (MSL). The Vaca Mountain Range located to the west and northwest of the

Airport exhibits rapidly rising terrain, while the topography of the Airport and areas south and east of the Airport are primarily flat. A slight dip in elevation occurs north of the Airport within a large flood detention basin.

The Department of Transportation does not identify any scenic highways within the vicinity of the Proposed Project site (DOT, 2012). The *Solano County General Plan's* Resource Element, however, designates both I-505 and I-80 as scenic roadways.

# 3.1.2 Regulatory Setting

#### **State**

## California Scenic Highway Program

California's Scenic Highway Program, run by Caltrans, was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. Responsibility for the development of scenic highways, and the establishment and application of specific planning and design standards and procedures falls to state and local agencies.

#### Local

#### Solano County General Plan

The following policies from the *Solano County General Plan* Resources Element are applicable to the Proposed Project:

**Policy RS.P-35:** Protect the unique scenic features of Solano County, particularly hills, ridgelines, wetlands, and water bodies.

**Policy RS.P-36:** Support and encourage practices that reduce light pollution and preserve views of the night sky.

Policy RS.P-37: Protect the visual character of designated scenic roadways.

#### City of Vacaville General Plan

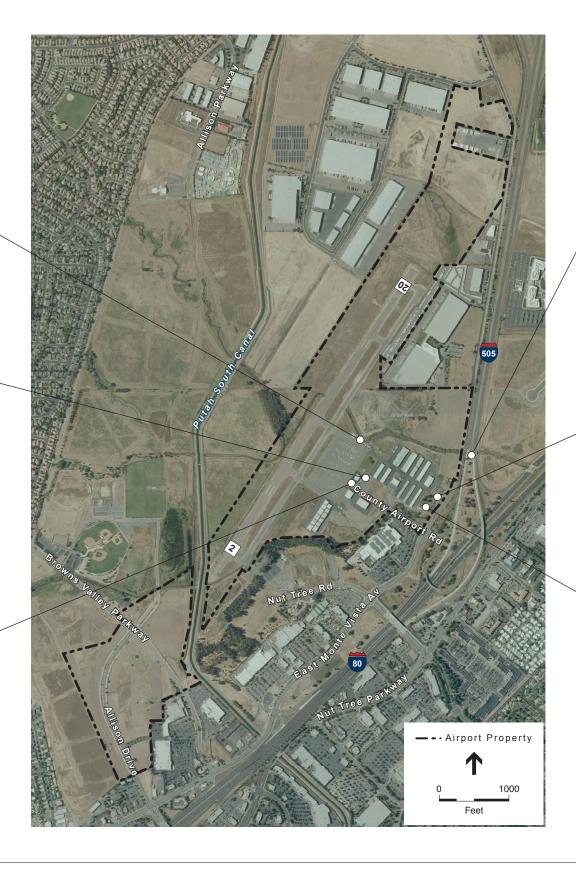
The following policies from the *City of Vacaville General Plan* Land Use Element are applicable to the Proposed Project:

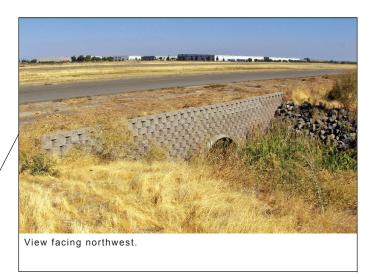
**Policy 2.1-G 9:** Preserve scenic features and the feel of a city surrounded by open space, and preserve view corridors to the hills, and other significant natural areas.



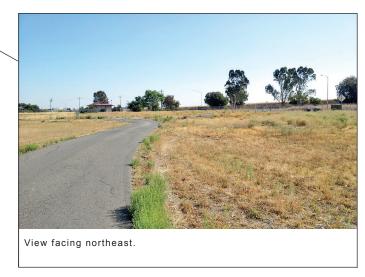














# 3.1.3 Analysis, Impacts, and Mitigation

## Significance Criteria

CEQA defines a significant effect on the environment as a substantial, or potentially substantial, adverse change in the physical conditions within the area affected by the Proposed Project. An impact on aesthetic resources would be considered significant if it would result in any of the following effects, as described in CEQA Guidelines, Appendix G:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway or local scenic route;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## **Methodology and Assumptions**

This analysis uses a common methodology that has three key steps: (1) identifying the visual character and quality of visual resources; (2) identifying the type, exposure, and sensitivity of viewers; and (3) identifying the potential change in visual resources. All three of these elements were considered when determining the significance of visual change resulting from implementation of the Proposed Project. The impacts of the Proposed Project were determined based on the comparison of changes to the existing conditions present in the local landscape.

## **Impacts and Mitigation Measures**

Impact 3.1-1: Could the Proposed Project have a substantial adverse effect on a scenic vista? (No Impact)

## Phase I Projects and Full Build-out

The Proposed Project is primarily located within the boundaries of Nut Tree Airport, which is located in the northern portion of the City of Vacaville. The Airport is located within a larger area that is predominately characterized by industrial, commercial, and office development; with pockets of open space located east and west of the Airport's property boundary. Areas located east of Nut Tree Airport have been designated by the City of Vacaville for future business park uses, while the area to the west of the Airport shall remain open for recreational purposes.

Though the City of Vacaville does not identify any specific scenic vistas within its city limits, the *City of Vacaville General Plan* does acknowledge the surrounding foothills of the Vaca Mountain Range as scenic resources. The closest foothills located to the Proposed Project site are approximately 3 miles to the west of the Airport. No other scenic vistas are identified within the vicinity of the Proposed Project.

Full build-out of the Proposed Project would include the development of several new structures; including new aircraft hangars, an expanded multi-use facility, and non-aviation, light industrial/commercial uses, as well as improvements to the airfield, such as the extension of the runway and taxiway system. The development of these structures would adhere to County development standards, and would be generally consistent with the character of the surrounding land uses, which include light industrial, warehousing, and office uses. Building mass and architectural style would be compatible with existing airport facilities and surrounding development. Given the lack of scenic vistas within the immediate vicinity of the Airport, and the distance between the Proposed Project and the Vaca Mountain foothills, full build-out of the Proposed Project would not have an impact on a scenic vista.

Mitigation Measures: None required.

Impact 3.1-2: Could the Proposed Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway or local scenic route? (Less Than Significant)

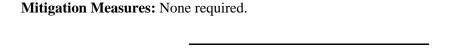
#### Phase I Projects and Full Build-out

Construction and operation of the Proposed Project would occur entirely within the boundaries of Nut Tree Airport. The Airport is located within the boundaries of the City of Vacaville; east of I-505 and north of I-80. Surrounding land uses include a mix of open space and industrial uses to the west and northwest, industrial uses to the north, office uses and open space to the east, commercial uses to the southeast, and open space and recreation fields to the south and southwest. Access to the Airport is gained via County Airport Road, a dead-end road that connects to East Monte Vista Avenue. Several small groves of trees are located on Airport property; including a cluster of tress that follow along the bank of Horse Creek (adjacent to East Monte Vista Avenue), and a small cluster of trees located north of existing hangars. A grove of eucalyptus trees is also located in the southeastern portion of Airport property. A cluster of trees are also located both east and south of the existing hangars, and two trees are located north of the current multi-use arrival/departure facility.

According to the DOT, no designated scenic highways are located within the vicinity of the Proposed Project site (DOT, 2012). However, Solano County does identify I-505 and I-80 as scenic roadways.

As described above, the project site is primarily developed with airport-related facilities. Implementation of the Proposed Project would result in the removal of several trees, which are isolated features; located between existing hangars and off-airport industrial development. Existing airport buildings, as well as landscaping between I-505 and the airport boundary, hinder most roadway views of the trees proposed for removal. The loss of the isolated handful of trees proposed for removal would result in a less-than-significant impact to scenic views for motorists in automobiles traveling at speed along nearby I-505. In summary, implementation of the

proposed project, while it would result in the removal of an existing, isolated clusters of trees, would result in a less-than-significant impact to I-505 as a designated scenic roadway.

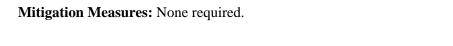


Impact 3.1-3: Could the Proposed Project substantially degrade the existing visual character or quality of the site and its surroundings? (*No Impact*)

## Phase I Projects and Full Build-out

The project site itself is a mix of open space and development. Horse Creek traverses the Airport property from east to west, and passes underneath the Airport's one runway via a culvert. Several small groves of trees are located on Airport property; including a cluster of tress that follow along the bank of Horse Creek (adjacent to East Monte Vista Avenue), and a small cluster of trees located north of existing hangars. A grove of eucalyptus trees is also located in the southeastern portion of Airport property. A cluster of trees are also located both east and south of the existing hangars, and two trees are located north of the current multi-use arrival/departure facility. Surrounding land uses primarily consist of light industrial, warehousing, commercial, and office land uses. Open space and recreation uses are located to the west of the Airport.

The Proposed Project would be constructed and operated on existing Airport property, within an area that is largely designated by the City of Vacaville for industrial and business park land uses. The development of proposed hangars, non-aviation facilities, would be constructed consistent with the County's development standards. Given that the Airport is surrounded primarily by light industrial, warehousing, and business park uses, the proposed facilities would generally be consistent with the overall visual character of the surrounding land uses. Therefore, the visual effect of all phases of the Proposed Project would not substantially degrade the visual character of the site and its surroundings. There is no impact.



Impact 3.1-4: Could the Proposed Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less Than Significant)

#### Phase I Projects and Full Build-out

The Proposed Project would include the replacement of existing airfield lights, as well as the addition of new lights for proposed structures (i.e., hangars and non-aviation land uses), vehicle parking areas, and aircraft parking apron. The Proposed Project would remove and replace lights on both ends of Runway 02/20, in order to accommodate the 200-foot shift of the runway on the Runway 20 in Phase I. Additional lighting would also be added to the runway/taxiway system in Phase III, when the Runway 20 is extend by 600 feet to the northeast. Lights that would be

installed along the taxiway would be medium intensity, and would generally stand no taller than eighteen inches off the ground. Lighting on the general aviation apron shall be of an appropriate height (e.g., less than 35 feet tall), shall be shielded and angled downwards, and shall make use of either high pressure sodium (HPS) or low pressure sodium (LPS) lights. Night-time security lights associated with the proposed hangars and non-aviation uses would be shielded and angled down in order to reduce glare that would potentially affect motorists traveling along East Monte Vista Avenue. Similarly, installation of solarized shade hangars would not cause glare issues as the solar panels would be angled upwards and are generally intended to absorb light rather than reflect it. Furthermore, given the lack of sensitive receptors in the vicinity of the project site (the nearest residential land use is located approximately 1,900 feet to the west), impacts due to glare or the addition of new light sources are anticipated to be less than significant.

Mitigation Measures: None required.	

## **Cumulative Impacts**

Impact 3.1-5: Could implementation of the Proposed Project result in a cumulatively considerable impact to aesthetics or light and glare? (Less Than Significant)

The geographic scope of the cumulative aesthetics, light, and glare analysis is the immediate area surrounding the airport. This is the area within view of the project and the most likely to experience changes in visual character or experience light and glare impacts. The Airport is located within an area that contains existing developed commercial and industrial land uses, as well as undeveloped open space. The facilities proposed for both all three phases of development will be designed to be compatible in architectural style and massing as the surrounding extant structures within areas already designated as acceptable for development. As such, the Proposed Project would not degrade the visual character of the project site or its surroundings. Therefore, the Proposed Project, in conjunction with other planned or approved projects, as identified in **Table 2-7**, would not have cumulatively significant aesthetic impacts. Furthermore, Phases I through III of the Proposed Project, as well as other development projects in the vicinity of the Airport, have the potential to introduce new sources of light and glare in the immediate area surrounding the airport. It is reasonable to assume that other projects would be required to reduce spillover light pollution pursuant to Solano County or City of Vacaville policies requiring design similar to that of the Proposed Project (i.e., limited intensity and height, shielded and angled lighting, etc). The proposed project would therefore have a less-than-significant contribution to light and glare. In summary, the Proposed Project would not contribute to or cause a cumulatively considerable impact to aesthetic resources, or light and glare impacts.

## 3.1.4 References

City of Vacaville, 2007. City of Vacaville General Plan, Land Use Element. December 2007.

Solano County, 2008. Solano County General Plan Resources Element. November 4, 2008.

Department of Transportation, 2012. California Scenic Highway Mapping System, www.dot.ca.gov/hq/LandArch/scenic\_highways/index.htm, accessed on October 24, 2012.

