4.6 TRANSPORTATION AND CIRCULATION

This section analyzes and discusses the potential traffic circulation and parking impacts of the Proposed Project including the traffic related to project construction.

4.6.1 ENVIRONMENTAL SETTING

4.6.1.2 Existing Conditions

ACCESS ROADWAYS

The Proposed Project site and the surrounding roadway network are presented below. **Exhibit 4.6-1**, *Regional Roadways*, shows the location of Gnoss Field Airport (DVO or Airport) in relationship to the major roads in the area.

Regional Access

U.S. Highway 101 (US 101) provides regional access for the Airport via the US 101/Atherton Avenue interchange. US 101 in the vicinity of the airport is a four lane (two lanes in each direction) divided, limited access roadway. 2008 data from California Department of Transportation indicates that the average annual daily traffic on US 101 at the Atherton Avenue interchanges is approximately 86,000 southbound vehicles and 79,000 northbound vehicles. Truck traffic makes up an estimated 4,500 or up to six percent of these vehicle trips.¹

Local Access

The primary access for DVO is Atherton Avenue to Binford Road to Airport Road. All of these roads are two-lane roadways at this location and none of these intersections are signalized. The Atherton Avenue/Binford Road intersection is the only one with a two-way stop with through traffic on Atherton. A recent survey of vehicle traffic on Airport Road found approximately 335 vehicles a day used the road. The survey indicated that there was not particular peaking in the vehicle traffic, rather they were spread out primarily through the daylight hours. Airport Road terminates at DVO and therefore is the only real origin/destination for vehicles on that road. Other commercial businesses, primary ministorage units, use Binford Road as an access.

Level of Service

The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying level of vehicle traffic, ranging from LOS A (indicating free-flow traffic with little or no delay) to LOS F (indicating congested conditions where traffic exceeds design capacity and results in long delays).

¹ http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/, accessed online November 13, 2009.

Marin County has established LOS D as the generally acceptable service level standard at most intersections throughout Marin County. US 101 in the area near the Atherton Avenue interchange is graded a LOS D during peak period flows (northbound having approximately 7,000 vehicles between 4:00 pm and 6:00 pm and southbound having approximately 6,400 vehicles between 6:00 am and 8:00 am). Atherton Avenue east of Binford Road is graded a LOS A.² It should be noted, however, that the operation of the US 101 southbound ramps/Atherton Avenue intersection is heavily influenced by operations at the adjacent Redwood Boulevard/Atherton Avenue intersection to the west. These intersections are only about 100 meters apart and storage is limited to about 12 vehicles per lane per Poor operations occur at this intersection, and the westbound signal cycle. approach queues impact operations at the upstream southbound ramps/Atherton Avenue intersection. Caltrans' Office of Highway Operations field study confirmed that the westbound traffic at the Redwood Boulevard/Atherton Avenue intersection occasionally backs up to the southbound ramps/Atherton Avenue intersection and causes queuing on the US 101 southbound off-ramp in the morning peak period.³

No formal LOS has been assigned to Binford or Airport Roads by Marin County, but based on analysis conducted for a negative declaration prepared for a project on Binford Road and observations of activity on these roads; they function at nearly a LOS A.⁴

PUBLIC TRANSIT

Marin County is served by the Marin County Transit District and the Golden Gate Bridge Transit District. Between these two organizations, three primary types of bus service are available to Marin County. The basic bus service provides daily service between Marin, San Francisco, Sonoma, and Contra Costa Counties. Commuter service provides peak period transit north and south with stops in Marin County. The Marin County local bus service provides weekday and limited weekend service within Marin County.^{5,6} There is no public transit service that directly serves DVO at this time. Near the intersection of Atherton Avenue and Binford Road is a park and ride lot where commuters can gather before sharing a ride or walking to the bus stop at the US 101/Atherton Avenue interchange.

² Binford Road Storage Facility Negative Declaration, 2007.

³ Marin-Sonoma Narrow (MSN) HOV Widening Project Final Environmental Impact Report/Final Environmental Impact Statement, July 2009.

⁴ Binford Road Storage Facility Negative Declaration, 2007.

⁵ Marin County Transit District System Map and Schedules, on-line at: http://www.marintransit.org/mapsskeds.html/ Retrieved October 21, 2011.

⁶ Golden Gate Transit Bus and Ferry System Map and Schedules, on-line at: http://goldengatetransit.org/schedules/pages/Bus-Schedules.php/ Retrieved October 21, 2011



BACK OF EXHIBIT 4.6-1

PEDESTRIAN AND BICYCLE TRAFFIC

There are no designated pedestrian crossings or lanes along Binford or Airport Road. There are no established bicycle lanes along Binford or Airport Road. Portions of Binford Road has widened gravel turn-off points or parking areas, but they are not continuous and do not provide a safe route for pedestrians or bicyclists. There are no plans at this time for a future bike lane or pedestrian path along Binford or Airport Roads.⁷

PARKING

The Airport currently has approximately 170 automobile parking spaces. The Proposed Project would not increase aircraft activity or result in a significant increase in the number of automobiles traveling to the airport. Therefore, the proposed runway extension project will not increase the demand for more parking spaces at the Airport and the impact of the project on parking is deemed less than significant.

4.6.2 ENVIRONMENTAL IMPACTS AND MITIGATION

4.6.2.1 Significance Criteria

According to Appendix G of the California Environmental Quality Act, a project would generally have a significant effect on transportation conditions if it would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Result in inadequate emergency access;
- f) Result in inadequate parking capacity; or
- g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

⁷ Marin County Unincorporated Area Bicycle and Pedestrian Master Plan, Adopted March 25, 2008. On-line at: http://www.walkbikemarin.org/documents.php

In addition to the above listed criteria from Appendix G, the following criteria are derived from Marin County supplemental requirements and common engineering practice:

- Cause the LOS at a signalized intersection to worsen from LOS D or better to LOS E or F, or cause an unsignalized intersection to warrant installation of a traffic signal;
- b) Cause the LOS on a regional roadway to worsen from LOS D or better to LOS E or F, or cause the peak-hour peak direction traffic volume to increase by more than three percent or more on a regional roadway that would operate at LOS F without the project;
- c) Result in projected parking demand that would exceed the proposed parking supply on a regular and frequent basis;
- d) Result in potential conflicts for pedestrians and bicyclists;
- e) Increase transit demand above levels provided by local transit operators or agencies; or
- f) Cause substantial damage or wear of public roadways by increased movement of heavy vehicles.

4.6.2.2 Environmental Impacts of the Proposed Project

Impact 4.6-1: Temporary increase in traffic due to construction activity (Potentially significant unless mitigated).

The Proposed Project would not alter or modify the roadways leading into the Airport. Based on the estimates prepared for construction, it is anticipated that the Proposed Project would add up to 33 vehicles (mainly trucks) a day to the local roadways, with the average over the 18-month construction period being approximately 20 vehicles a day. There is no specific pattern of distribution that can be applied to determine when the vehicles will be using the roadways because it will change over the course of time as the construction enters different phases. However, a general distribution of the construction traffic may be assumed to be approximately 75 percent haul trips that will occur throughout the typical work day (8:00 am to 3:00 pm). The other 25 percent of the construction traffic would be workers coming to and from the site and deliveries of materials throughout the day. The roadways to be used would be Airport Road, Binford Road, and the portion of Atherton Avenue between Binford Road and the interchange with US 101. Depending on the origin and destination of the vehicles, US 101 north and south would receive some portion of these vehicles.

Given the physical design and condition of Airport Road and Binford Road, as well as the relatively low levels of existing traffic on these roads, the additional 20 to 33 vehicles a day would not significantly impact the ability of the road to handle traffic. Atherton Avenue and US 101 are physically capable of handling the additional vehicles and the number of vehicles would be relatively small compared to the existing level of traffic on these roads. Even if all 33 vehicles occurred during the peak periods for US 101, it would represent less than one percent of the existing volume. However, any increase in the number of trucks/vehicles at the Highway 101/Atherton Avenue interchange would be significant given the level of congestion during the peak hours. Therefore, construction traffic could result in a potentially significant impact if not mitigated. After construction is complete, the level of vehicles accessing the Airport would return to normal levels and the long term traffic impacts of the project are deemed less than significant.

Mitigation Measure 4.6-1: Marin County shall require contractors to transport material and equipment to and from the site outside of the peak congestion periods at the Highway 101/Athrerton Avenue intersection to minimize any potential traffic conflicts. Congestion monitoring studies indicate that recurrent delays occur on southbound and northbound US 101 during the P.M. peak traffic period between 3:00 P.M. and 6:30 P.M., with the primary northbound P.M. peak period bottleneck developing north of the Atherton Avenue Interchange.⁸

Significance After Mitigation – Implementation of Mitigation Measure 4.6.1 will reduce the construction traffic impact to reduce the impact to less than significant levels.

Responsibility and Monitoring – The Marin County Department of Public Works shall be responsible for incorporating the provisions of Mitigation Measure 4.6-1 into all construction contracts and individual contractors would ultimately implement the mitigation measures.

4.6.3 CUMULATIVE IMPACTS OF THE PROPOSED PROJECT

No cumulative or long-term traffic and parking impacts would occur as a result of the Proposed Project due to the temporary nature of the increase in vehicle traffic associated with construction. The Binford Road Storage Facility negative declaration included a discussion of cumulative impacts that is relevant to this project due to the location of the storage facility near the Airport.⁹ That study found that proposed build out of the area around the intersection of Binford Road and Atherton Avenue would result in a precipitous decline in LOS at the intersection. However, this decline would occur over many years as new development that generates traffic occurs. Because the Proposed Project would generate only short term construction traffic and the relatively small increase of traffic associated with construction would not significantly impact the surrounding roads, the project would not contribute to the significant cumulative impacts at this intersection.

⁸ Marin-Sonoma Narrow (MSN) HOV Widening Project Final Environmental Impact Report/Final Environmental Impact Statement, July 2009.

⁹ Binford Road Storage Facility Negative Declaration, 2007.

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