Baywood Avenue Hotel Development

Traffic Impact Analysis

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Executive Summary

This report presents the results of the traffic impact analysis conducted for the proposed hotel development located at 375 S. Baywood Avenue, on the northwest corner of Baywood Avenue and Hemlock Avenue. The project site is located within a designated Urban Village (Valley Fair/Santana Row). According to the Envision San Jose 2040 General Plan, the Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design

The proposed development would consist of the replacement of two single-family homes on the project site with an 11-story 105-room hotel. The hotel will include three below-grade parking levels with access from Baywood Avenue and providing 70 parking spaces on-site.

Scope of Study

The purpose of the study is to identify the potential traffic impacts related to the proposed project. The potential impacts related to the proposed development were evaluated following the standards and methodologies set forth by the City of San Jose and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP).

The study includes an analysis of AM and PM peak-hour traffic conditions for six signalized intersections and one unsignalized intersection within the City of San Jose. The study intersections were selected based upon the estimated number of project trips that are projected to be added through the intersections (10 or more trips per lane per hour). Any intersections outside of the study area to which the project would not add 10 or more trips per lane per hour, were not studied because the addition of project traffic would not be a sufficient amount to result in the degradation of intersection levels of service. The study also includes an operations analysis, based on vehicle-storage requirements at select intersections and an evaluation of the proposed site access and on-site circulation. An analysis of freeway segments was not performed because the proposed project would not add traffic equal to at least one percent of capacity of any freeway segment. However, per CMP guidelines, the traffic study includes an evaluation to document the determination that a freeway level of service analysis is not required.

Traffic conditions at all of the study intersections and freeway segments were analyzed for the weekday AM and PM peak hours. The weekday AM peak hour of traffic is generally between 7:00 and 9:00 AM.
and the weekday PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on a typical weekday.

**Project Trip Generation**

Based on the ITE trip generation rates and credit for existing use on the project site, it is estimated that the proposed project would generate a net additional 1,265 daily trips, with 64 trips (38 inbound and 26 outbound) occurring during the AM peak hour and 75 trips (37 inbound and 38 outbound) occurring during the PM peak hour.

**Background Plus Project Intersection Level of Service Analysis**

Table ES-1 summarizes the results of the intersection level of service analysis under background plus project conditions. The results show the study intersections would not be significantly impacted by the project under background plus project conditions, according to the City of San Jose and CMP impact criteria.

**Freeway Segment Capacity**

Per CMP technical guidelines, freeway segment level of service analysis shall be conducted on all segments to which the project is projected to add one percent or more to the segment capacity. Since the project is not projected to add one percent to any freeway segments in the area, freeway analysis for the CMP was not required.

**Cumulative Intersection Level of Service Analysis**

Table ES-1 summarizes the results of the intersection level of service analysis under cumulative conditions. The results show that, measured against the City of San Jose level of service impact criteria, the project’s contribution in total volume from background traffic conditions to cumulative traffic conditions would be less than 25 percent at all of the intersections identified to be impacted by the total cumulative project trips. Therefore, the proposed project traffic will not result in a significant impact under cumulative conditions.

**Other Transportation Issues**

**Site Access**

A three-level below-grade parking garage will provide on-site parking with one access point located along Baywood Avenue at the northern perimeter of the project boundary. The parking garage entrance on Baywood Avenue is shown to be 24 feet wide. According to the City of San Jose municipal code, on-site drive aisles that serve two-way drive aisles should be 26 feet wide and driveway widths should match the 26 feet wide drive aisles. The project will be required to construct the Baywood Avenue driveway to meet the 26 feet wide city standard.
**On-Site Circulation**

The City’s standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces. As shown on the site plan, the drive aisles with adjacent parking on each level measure 24 feet wide, which do not meet the City’s standard width. Drive aisles less than 26 feet are adequate, where parking is located on only one side of the drive aisle. Drive aisles less than 26 feet wide with parking on both sides will require City’s review and approval.

There is one proposed dead-end aisle at the end of the 3rd basement parking level. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic. All locations where dead-end aisles are provided should be dedicated for valet parking or employee use.

Overall, the site plan exhibits adequate site access for motor vehicles and large trucks. The City ultimately will determine the adequacy of the proposed driveways and internal on-site circulation design.

**Intersection Operations Analysis**

**Baywood Avenue and Stevens Creek Boulevard**

**Westbound Left-Turn**

The queuing analysis indicates that the maximum vehicle queue for the westbound left-turn pocket at the Baywood Avenue and Stevens Creek Boulevard intersection currently exceeds the existing vehicle storage capacity and will continue to do so under background and background plus project conditions during both the AM and PM peak hours.

The westbound left-turn pocket currently provides approximately 125 feet of vehicle storage, which can accommodate approximately five vehicles. The estimated 95th percentile vehicle queue for the westbound left-turn movement is projected to be approximately 7 and 10 vehicles during the AM and PM peak hours, respectively, under background conditions. The addition of project traffic would lengthen the projected vehicle queue by no more than two vehicles during the peak hours.

The westbound left-turn pocket at the Baywood Avenue and Stevens Creek Boulevard intersection will be modified along with the planned re-location of the intersection as part of the planned Valley Fair expansion. The existing westbound left-turn pocket can be planned to provide the necessary 275 feet of storage by removing the existing median and trees along Stevens Creek Boulevard.

**Transit Services**

The project site is not directly served by any transit services other than the limited-stop 323 VTA bus line that has a stop at the intersection of Santana Row and Stevens Creek Boulevard approximately 1,000 to 1,400 feet northwest of the project site. Local bus line 60 operates along Winchester Boulevard. Bus stops for this line in the northbound and southbound directions are located near the Winchester Boulevard/Olin Avenue and Winchester Boulevard/Stevens Creek Boulevard intersections, respectively. It can be assumed that some guests/employees of the proposed hotel would utilize the existing transit service. Applying an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately two new transit riders during the AM peak hour and three during the PM peak hour. Assuming the existing transit service would
remain unchanged with line 60 providing service with 15-20-minute headways during the peak commute periods at bus stops along Winchester Boulevard, the estimated number of new transit riders using the bus stops located near the project site would equate to no more than one new rider per bus during the peak hours. VTA operations reports indicate that the 60 bus line as well as several other bus lines in the project area serve less than ideal ridership. Therefore, the new riders due to the proposed project could be accommodated by the current available capacity of the bus service in the study area and improvement of the existing transit service would not be necessary with the project.

**Bicycle and Pedestrian Facilities**

Currently, there is no existing bike link between the project site and other existing bicycle facilities in the area. The San Jose Bike Plan 2020 and Envision 2040 General Plan, as described below, identify planned improvements to the bicycle network within the City and provide policies and goals that are intended to promote and encourage the use of multi-modal travel options and reduce the identified project impacts to the roadway system. The planned improvements to the bicycle network will provide the project site with improved connections to surrounding pedestrian/bike and transit facilities and a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies.

Pedestrian traffic primarily would consist of guests and employees of the proposed hotel development walking to and from surrounding retail establishments, as well as bus stops on Stevens Creek Boulevard and Winchester Boulevard. Crosswalks with pedestrian signal heads are located at all signalized intersections in the study area. All of the roadways in the vicinity of the project site have sidewalks on both sides of the street.

**Public Transit/Pedestrian/Bike Improvements**

The proposed project site is located within the Valley Fair/Santana Row Urban Village boundary. Sites within an Urban Village must incorporate additional urban design and architectural elements that will facilitate a building with pedestrian orientated design and activate the pedestrian public right-of-way.

The Envision 2040 General Plan identifies goals and policies that are dedicated to the enhancement of the transportation infrastructure, including public transit and pedestrian/bike facilities. The Transportation Policies contained in the General Plan create incentives for non-auto modes of travel while reducing the use of single-occupant automobile travel as generally described below:

- Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling walking, and transit facilities.
- Give priority to the funding of multimodal projects to provide the most benefit to all users of the transportation system.
- Encourage the use of non-automobile travel modes to reduce vehicle miles traveled (VMT)
- Consider the impact on the overall transportation system when evaluating the impacts of new developments.
- Increase substantially the proportion of travel modes other than single-occupant vehicles.

The planned improvements discussed below are intended to reduce single-occupant vehicle travel by providing the project site with viable connections to surrounding pedestrian/bike and transit facilities and provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies. However, the full implementation of the improvements are beyond the means of the proposed project given that they may require right-of-way from adjacent properties. The project could be required to make a fair-share contribution towards the cost of the improvements since the identified improvements would be of benefit to the project.
**Bicycle and Pedestrian Facility Improvements**

The Envision 2040 General Plan identifies the following goals in regard to bicycling and pedestrians:

- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments.
- Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
- Give priority to pedestrian improvement projects that improve pedestrian safety, improve pedestrian access to and within the Urban Villages and other growth areas.

The San Jose Bike Plan 2020 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

**Class II bike lanes are planned for:**

- Moorpark Avenue, between Thorton Way and College Drive
- Winchester Boulevard, between Moorpark Avenue and Payne Avenue
- Tisch Way, between Winchester Boulevard and Monroe Street

**Transit Facility Improvements**

The Envision 2040 General Plan identifies the following goals in regard to public transit:

- Pursue development of BRT, bus, shuttle, and fixed guideway services on designated streets and connections to major destinations.
- Ensure that roadways designated as Grand Boulevards adequately accommodate transit vehicle circulation and transit stops. Prioritize bus mobility along Stevens Creek Boulevard.

Stevens Creek Boulevard has been designated as a Grand Boulevard within the Envision 2040 General Plan. Grand Boulevards are intended to serve as major transportation corridors with priority given to public transit. There is a BRT line planned for the West San Carlos Street/Stevens Creek Boulevard corridor. The BRT will run on Stevens Creek Boulevard. Two BRT infrastructure solutions have been proposed: a single reversible transit-only lane between Winchester and MacArthur; and a dual-lane, transit-only overhead viaduct between Henry and MacArthur. The former option would include a center passing lane through the station loading areas, while the latter would include an aerial station.

The Stevens Creek Boulevard corridor serves as the primary access point to major retail/commercial destinations along Stevens Creek Boulevard and access to the area from the regional freeways of I-280 and I-880 is limited to their interchanges with Stevens Creek Boulevard. The proposed center lane BRT will require the removal of one travel lane in each direction of travel along a segment of Stevens Creek Boulevard between Winchester Boulevard and I-880 that is already congested. The removal of vehicular capacity along the primary travel corridor will result in a significant increase in congestion on the segment. Therefore, it is recommended that future BRT service along Stevens Creek Boulevard between Winchester Boulevard and I-880 be accommodated within the existing travel lanes.

The West San Carlos Street/Stevens Creek Boulevard BRT is in only the preliminary stages of its environmental review and there is no identified schedule for its completion.
Parking

Vehicle Parking

On-site parking would include 70 parking spaces within the three below-grade parking levels. Per the City of San Jose Municipal Code (Chapter 20.90.060) hotel land uses are required to provide one space per hotel room or suite plus one space per employee. Based on the City’s parking requirements and an estimated 10 hotel employees, the project is required to provide a total of 115 off-street parking spaces. The project is proposing a total of 70 parking spaces, which is a 39 percent reduction from the normal parking code. The project is located in the Valley Fair/Santana Row Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. A separate TDM plan has already been prepared for the proposed project. In accordance with Sections 20.70.330 and 20.90.220 of the San Jose Code of Ordinances, which allows up to a 50% parking reduction, the additional 19 percent reduction is allowed with the implementation and maintenance of a TDM plan. A separate TDM plan for the proposed project, dated April 26, 2018, has been prepared by Hexagon. The project will be required to submit and have approved by the City its TDM program.

Santana Residential Parking Program (RPP)

The project site is located within the Santana Residential Parking Program (RPP) zone, where a permit is required to use on-street parking from 6PM to 7AM on weekdays and anytime on weekends and holidays. In order to obtain a parking permit, the applicant must live in or own a residential property or operate a business in a parking permit zone. Generally, this means that the residence or business must be located on the same side of the street and block face where permit parking signs are posted.

Bicycle Parking

For hotel land uses, the City’s Bicycle Parking requirements require one bicycle parking space plus one space per 10 guest rooms. Based on the City’s Bicycle Parking requirements, the proposed project is required to provide 12 bicycle parking spaces to meet the City’s standards. The site plan indicates that the proposed project would include bike racks on the first below-grade parking level adjacent to the garage entrance. The proposed project should provide adequate bicycle parking to meet the City’s requirements.
## Table ES 1
### Intersection Level of Service Summary

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<th>LOS Standard&lt;sup&gt;1&lt;/sup&gt;</th>
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<th>Existing Std.</th>
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<th>% of Volume Increase</th>
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<td>21.9 C</td>
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</tbody>
</table>

* Denotes CMP Intersection

Bold indicates unacceptable level of service.

Bold and boxed indicate significant impact.

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<sup>1</sup> LOS standard shown in the table is based on the City of San Jose’s level of service policy. The LOS standard for CMP intersections is LOS E.
1. Introduction

This report presents the results of the traffic impact analysis conducted for the proposed hotel development located at 375 S. Baywood Avenue, on the northwest corner of Baywood Avenue and Hemlock Avenue. The project site is located within a designated Urban Village (Valley Fair/Santana Row). According to the Envision San Jose 2040 General Plan, the Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design

The proposed development would consist of the replacement of two single-family homes on the project site with an 11-story 105-room hotel. The hotel will include three below-grade parking levels with access from Baywood Avenue and providing 70 parking spaces on-site. The project site location and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

Scope of Study

The purpose of the study is to identify the potential traffic impacts related to the proposed project. The potential impacts related to the proposed development were evaluated following the standards and methodologies set forth by the City of San Jose and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP).

The study includes an analysis of AM and PM peak-hour traffic conditions for six signalized intersections and one unsignalized intersection within the City of San Jose. The study intersections were selected based upon the estimated number of project trips that are projected to be added through the intersections (10 or more trips per lane per hour). Any intersections outside of the study area to which the project would not add 10 or more trips per lane per hour, were not studied because the addition of project traffic would not be a sufficient amount to result in the degradation of intersection levels of service. The study also includes an operations analysis, based on vehicle-storage requirements at select intersections and an evaluation of the proposed site access and on-site circulation. An analysis of freeway segments was not performed because the proposed project would not add traffic equal to at least one percent of capacity of any freeway segment. However, per CMP guidelines, the traffic study includes an evaluation to document the determination that a freeway level of service analysis is not required. The study intersections are identified below.
Figure 1
Site Location and Study Intersections
Figure 2
Site Plan
**Study Intersections**

1. Winchester Boulevard and Stevens Creek Boulevard* (Protected)
2. Santana Row and Stevens Creek Boulevard
3. Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard
4. Monroe Street and Stevens Creek Boulevard (Protected)
5. I-880 SB Ramps and Stevens Creek Boulevard*
6. I-880 NB Ramps and Stevens Creek Boulevard
7. Redwood Avenue and Stevens Creek Boulevard (Unsignalized)

*Denotes CMP Intersection

Traffic conditions at all of the study intersections and freeway segments were analyzed for the weekday AM and PM peak hours. The weekday AM peak hour of traffic is generally between 7:00 and 9:00 AM and the weekday PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on a typical weekday. Traffic conditions were evaluated for the following scenarios:

**Scenario 1:** Existing Conditions. Existing AM and PM peak hour traffic volumes at all study intersections were obtained from the City of San Jose, the 2016 CMP Annual Monitoring Report, previously completed traffic studies, and supplemented with new manual turning-movement counts conducted in April 2018.

**Scenario 2:** Existing Plus Project Conditions. Existing plus project peak hour traffic volumes were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.

**Scenario 3:** Background Conditions. Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed developments. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI). Background conditions represent the baseline conditions to which project conditions are compared for the purpose of determining project impacts.

**Scenario 4:** Background Plus Project Conditions. Projected peak hour traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.

**Scenario 5:** Cumulative Conditions. Cumulative conditions represent future traffic volumes on the future transportation network. Cumulative conditions include traffic growth projected to occur due to the approved development projects, the proposed project, and other proposed but not yet approved (pending) development projects in the study area.

**Methodology**

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.
Data Requirements

The data required for the analysis were obtained from previous traffic studies, new traffic counts, the City of San Jose, the 2016 CMP Annual Monitoring Report, and field observations. The following data were collected from these sources:

- existing traffic volumes
- lane configurations
- signal timing and phasing
- average speeds on freeway segments
- a list of approved and planned projects

Analysis Methodologies and Level of Service Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The analysis methods are described below.

Signalized Intersections

Signalized study intersections located in the City of San Jose are subject to the City of San Jose’s level of service standards. The City of San Jose level of service methodology is TRAFFIX, which is based on the 2000 Highway Capacity Manual (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersections level of service methodology, the City of San Jose’s methodologies employs the CMP defaults values for the analysis parameters. The City of San Jose’s level of service standard for intersections is LOS D or better. The correlation between average delay and level of service is shown in Table 1.

City of San Jose Protected Intersection Policy

The intersections of Winchester Boulevard/Stevens Creek Boulevard and Monroe Street/Stevens Creek Boulevard have been identified as City of San Jose Protected Intersections.

Protected Intersections consist of locations (there are a total of 30) that have been built to their planned maximum capacity and where expansion of the intersection would have an adverse effect on other transportation facilities (such as pedestrian, bicycle, transit systems, etc.). Protected Intersections are, therefore, not required to maintain a Level of Service D, which is the City of San Jose standard. The deficiencies at all 30 Protected Intersections in the City of San Jose have been disclosed and overridden in previous EIRs.

If a development project has significant traffic impacts at a designated Protected Intersection, the project may be approved if offsetting Transportation System Improvements are provided. The offsetting improvements are intended to provide other transportation benefits for the community adjacent to the traffic impact. The improvements may include enhancements to pedestrian, bicycle, and transit facilities, as well as neighborhood traffic calming measures and other roadway improvements.

The City will preliminarily identify a list of specific offsetting improvements. Priority is given to improvements identified in previously adopted plans such as area-wide specific or master plans, redevelopment plans, or plans prepared through the Strong Neighborhoods Initiative. Community outreach should occur in conjunction with the project review and approval process. Once the specific
improvements have been identified, the developer must submit improvement plans to the City of San Jose Department of Public Works for review and approval. The specific offsetting improvements proposed can be finalized during the subsequent planning permit stages and can be described in the Final EIR.

**CMP Signalized Intersections**

Since TRAFFIX is the designated level of service methodology for the CMP and the City of San Jose, the CMP study intersections are not analyzed separately, but rather are among the signalized intersections analyzed using TRAFFIX. The only difference between the City’ and CMP analyses is that project impacts are determined on the basis of different level of service standards – the CMP level of service standard for signalized intersections is LOS E or better.

**Report Organization**

The remainder of this report is divided into seven chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 describes the method used to estimate project traffic and the resulting traffic conditions...
expected under existing plus project conditions. Chapter 4 presents the intersection levels of service under background conditions with the addition of traffic from approved development projects. Chapter 5 presents traffic conditions and potential project impacts and recommended mitigation measures under background plus project conditions. Chapter 6 presents the traffic conditions in the study area under cumulative conditions with the addition of traffic from development projects that are not yet approved. Chapter 7 presents the analysis of other transportation related issues, including site access and on-site circulation, and parking. Chapter 8 presents the conclusions of the traffic impact analysis.
2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. Also included are the existing levels of service of the key intersections in the study area.

Existing Roadway Network

Regional access to the project site is provided via I-880 and I-280. These facilities are described below.

I-880 is a six-lane freeway in the vicinity of the site. It extends north to Oakland and south to I-280 in San Jose, at which point it makes a transition into SR 17 to Santa Cruz. Access to the site is provided via its interchange with Stevens Creek Boulevard.

I-280 is an eight-lane freeway in the vicinity of the site. It extends northwest to San Francisco and east to King Road in San Jose, at which point it makes a transition into I-680 to Oakland. North of I-880, I-280 has high occupancy vehicle (HOV) lanes in both directions. Access to and from northbound I-280 to the site is provided via its interchange with Winchester Boulevard.

Local access to the site is provided by Stevens Creek Boulevard, Winchester Boulevard, Tisch Way, Hatton Street, Redwood Avenue, and Baywood Avenue. These roadways are described below.

Stevens Creek Boulevard is a divided six-lane east-west roadway in the vicinity of the project site. It extends from Cupertino eastward to I-880, at which point it makes a transition into San Carlos Street to Downtown San Jose. Access to the site from Stevens Creek Boulevard is provided via its intersection with Baywood and Redwood Avenues.

Winchester Boulevard is a divided six-lane north-south roadway that runs from Los Gatos to Lincoln Street in Santa Clara. Winchester Boulevard provides access to the project site via its intersection with Stevens Creek Boulevard, Tisch Way, Olsen Drive, and Olin Avenue.

Tisch Way is a two-lane east-west roadway that extends eastward from Winchester Boulevard to South Monroe Street. Access to the project site from Tisch Way is provided via Hatton Street.

Hatton Street is a two-lane north-south roadway that extends from Tisch Way to Redwood Avenue/Baywood Avenue. Access to the project site is provided via Hemlock Avenue to Baywood Avenue.
Redwood Avenue is a two-lane north-south roadway that runs between Stevens Creek Boulevard and Baywood Avenue. Access to the project site from Redwood Avenue is provided via Hemlock Avenue to Baywood Avenue.

Baywood Avenue is a two-lane north-south roadway that runs between Redwood Avenue and Stevens Creek Boulevard. Baywood Avenue provides direct access to the project site via one full-access driveway.

Existing Bicycle and Pedestrian Facilities

Class II Bikeway (Bike Lane). Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Within the vicinity of the project site, striped bike lanes are present on the following roadway segments:

- Winchester Boulevard, between Moorpark Avenue and Stevens Creek Boulevard
- Monroe Street, between Stevens Creek Boulevard and Forest Avenue
- Stevens Creek Boulevard, between Monroe Street and Di Salvo Avenue
- Moorpark Avenue, between Thornton Way and San Tomas Expressway

Although none of the residential streets near the project site (i.e., Baywood Avenue and Redwood Avenue) provide bike lanes or are designated as bike routes, due to their low traffic volumes, many of them are conducive to bicycle usage. The existing bicycle facilities are shown in Figure 3.

Pedestrian facilities in the project area consist primarily of sidewalks along all surrounding streets. Sidewalks are found along virtually all previously described local roadways in the study area and along the local residential streets and collectors near the site. At the Monroe Street and Tisch Way intersection, there is a pedestrian footbridge over I-280 connecting Monroe Street/Tisch Way and Moorpark Avenue. Crosswalks across Stevens Creek Boulevard are provided near the project site at Monroe Street, the Valley Fair entrance, and at Santana Row. The Valley Fair entrance intersection with Stevens Creek Boulevard will be relocated to align with Baywood Avenue as part of the Valley Fair Mall expansion project. The new intersection will provide a controlled crossing point between the project site and amenities provided at Valley Fair Mall. Overall, the existing network of sidewalks and crosswalks provides good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the area.

Existing Transit Services

Existing transit service to the study area is provided by the VTA (see Table 2). The local bus routes near the project site are shown on Figure 4.

The nearest bus stop location is located at the Stevens Creek Boulevard and Santana Row intersection, approximately 1,000 to 1,400 feet north west of the project site and is served by Express Route 323. Other bus stops approximately ½ mile from the project site include those at the intersections of Stevens Creek Boulevard and Winchester Boulevard, Olin Avenue and Winchester Boulevard, and Olsen Drive and Winchester Boulevard. The bus stops on Stevens Creek Boulevard are served by Routes 23 and 323, while the bus stops on Winchester Boulevard are served by Routes 23 and 60. The Valley Fair Transit Center is located within ¾ of a mile of the project site adjacent to Westfield Valley Fair, along Forest Avenue. The Valley Fair Transit Center is served by two bus routes, Route 23 and Route 60.

Limited-stop express route 323 operates along Stevens Creek Boulevard between Downtown San Jose and De Anza College. Route 23 provides service between DeAnza College and the Alum Rock Transit
Figure 3
Existing Bicycle Facilities

LEGEND:
- = Project Site Location
- = City of San Jose
- = Class II Bike Lane
- = Bike/Ped Freeway Crossing
Figure 4
Existing Transit Services
Table 2
Existing Transit Services

<table>
<thead>
<tr>
<th>Transit Service</th>
<th>Route Description</th>
<th>Nearest Stop</th>
<th>Headway (^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTA Local Route 23</td>
<td>De Anza College to Alum Rock Transit Center</td>
<td>Valley Fair Transit Center</td>
<td>10-15 mins</td>
</tr>
<tr>
<td></td>
<td>via Stevens Creek Blvd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VTA Local Route 60</td>
<td>Winchester Transit Center to Great America</td>
<td>Valley Fair Transit Center</td>
<td>15-20 mins</td>
</tr>
<tr>
<td>VTA Express Route 323</td>
<td>Downtown San Jose to De Anza College</td>
<td>Stevens Creek Blvd &amp; Santana Row Intersection</td>
<td>12-16 mins</td>
</tr>
</tbody>
</table>

\(^1\)Headway during peak commute periods in the project area.

Center via Stevens Creek Boulevard, with 10-15-minute headways during commute hours. Route 60 provides service between the Winchester Transit Center and Great America via Winchester Boulevard, with 15-20-minute headways during commute hours.

Routes 23 and 323 connect to other services such as Caltrain, VTA LRT, and ACE in Downtown San Jose.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 5.

Existing Traffic Volumes

Existing peak hour traffic volumes at all study intersections were obtained from the City of San Jose, the 2016 CMP Annual Monitoring Report, previously completed traffic studies, and supplemented with new manual turning-movement counts conducted in April 2018. Traffic volumes along Stevens Creek Boulevard are currently affected by the expansion of Valley Fair Mall that is currently under way. For this reason, 2015 counts were utilized in the analyses for three of the study intersections (Santana Row/Stevens Creek Boulevard, Valley Fair Entrance/Stevens Creek Boulevard, and Monroe Street and Stevens Creek Boulevard). The existing peak-hour intersection volumes are shown on Figure 6. Intersection turning-movement counts conducted for this analysis are presented in Appendix A. Peak hour intersection turning movement volumes for all intersections and study scenarios are tabulated in Appendix C.

Existing Intersection Level of Service Analysis

The results of the intersection level of service analysis under existing conditions are summarized in Table 3. The results show that, measured against the City of San Jose and CMP level of service standards, all of the study intersections currently operate at acceptable levels during both of the AM and PM peak hours. The level of service calculation sheets are included in Appendix D.
LEGEND:

- Stop-Controlled Intersection
- Signalized Intersection

Existing Lane Configurations 5-10-18

Figure 5
Existing Lane Configurations
LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
Table 3
Existing Intersection Levels of Service

<table>
<thead>
<tr>
<th>Int. #</th>
<th>Intersection</th>
<th>LOS Standard</th>
<th>Peak Hour</th>
<th>Count Date</th>
<th>Avg. Delay</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Winchester Boulevard and Stevens Creek Boulevard * (Protected)</td>
<td>D</td>
<td>AM</td>
<td>10/11/16</td>
<td>33.3</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>10/20/16</td>
<td>47.0</td>
<td>D</td>
</tr>
<tr>
<td>2</td>
<td>Santana Row and Stevens Creek Boulevard</td>
<td>D</td>
<td>AM</td>
<td>10/21/15</td>
<td>13.3</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>10/21/15</td>
<td>27.4</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard</td>
<td>D</td>
<td>AM</td>
<td>10/21/15</td>
<td>7.5</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>10/21/15</td>
<td>20.7</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>Monroe Street and Stevens Creek Boulevard (Protected)</td>
<td>D</td>
<td>AM</td>
<td>10/21/15</td>
<td>29.7</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>10/21/15</td>
<td>34.6</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>I-880 SB Ramps and Stevens Creek Boulevard *</td>
<td>D</td>
<td>AM</td>
<td>10/11/16</td>
<td>23.8</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>11/10/16</td>
<td>22.5</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>I-880 NB Ramps and Stevens Creek Boulevard</td>
<td>D</td>
<td>AM</td>
<td>04/24/18</td>
<td>19.7</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PM</td>
<td>04/24/18</td>
<td>21.1</td>
<td>C</td>
</tr>
</tbody>
</table>

* Denotes CMP Intersection

1 LOS standard shown in the table is based on the City of San Jose's level of service policy. The LOS standard for CMP intersections is LOS E.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field.

Field observations revealed the following operational problems that may not be reflected in level of service calculations:

In general, Stevens Creek Boulevard experiences heavy congestion during the weekday PM peak hour in both directions of travel between Winchester Boulevard and I-880. The congestion is made worse by the close spacing of several signalized intersections along the roadway. At its intersections with I-880 and Monroe Street, vehicles do not clear at nearly every approach during the PM peak hour. Left-turn queues in the westbound direction regularly extend out of the provided turn-pockets at its intersections with Winchester Boulevard and Santana Row during the PM peak hour. Vehicles making the westbound left-turn movement at Santana Row do not clear within the allotted green time. Left-turn pockets in the eastbound direction are adequate with no vehicles spilling out of the provided storage.

The right lane on eastbound Stevens Creek Boulevard is sometimes congested from I-880 to Santana Row with vehicles accessing the southbound I-880 or I-280 on-ramps. Consequently, some vehicles aggressively enter the right lane at the last minute to avoid the long wait.

All other study intersections operate without any major operational problems.
3. Existing Plus Project Conditions

This chapter describes existing traffic conditions with the addition of the traffic that would be generated by the proposed project. Existing plus project traffic conditions could potentially exist if the project was constructed and occupied prior to the other approved projects in the area. It is unlikely that this traffic condition would occur, since other approved projects expected to add traffic to the study area would likely be built and occupied during the time the project is going through the development review and construction process. This scenario describes a less congested traffic condition, since it ignores any potential traffic from prior approvals. Existing plus project conditions also does not include any planned and funded roadway improvements that have not been constructed. Projected traffic volumes based on the trip generation estimates and assignment of project trips were developed using the same methods discussed and presented in Chapter 5.

Existing Plus Project Transportation Network

It is assumed in this analysis that the transportation network under existing plus project conditions would be the same as the existing transportation network.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Based on the ITE trip generation rates and credit for existing use on the project site, it is estimated that the proposed project would generate an additional 1,265 daily trips, with 64 trips (38 inbound and 26 outbound) occurring during the AM peak hour and 75 trips (37 inbound and 38 outbound) occurring during the PM peak hour. The trip generation estimates for proposed project are presented in Table 6 in Chapter 5.
Trip Distribution and Assignment

The trip distribution pattern for the proposed project was estimated based on traffic patterns on the surrounding roadway system and on the locations of complementary land uses. Project trip distribution and assignment are discussed in detail in Chapter 5. A tabular summary of project traffic at each study intersection is contained in Appendix C.

Existing Plus Project Traffic Volumes

Project trips, as represented in the project trip assignment discussed above, were added to existing traffic volumes to obtain existing plus project traffic volumes. The existing plus project traffic volumes are shown on Figure 7. Traffic volumes for all components of traffic are tabulated in Appendix C.

Existing Plus Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under existing plus project conditions are summarized in Table 4. The results show that, measured against the City of San Jose and CMP level of service standards, all of the study intersections are projected to operate at acceptable levels of service during both the AM and PM peak hours of traffic. The level of service calculation sheets are included in Appendix D.

Table 4
Existing Plus Project Intersection Levels of Service

<table>
<thead>
<tr>
<th>Int. #</th>
<th>Intersection</th>
<th>LOS Standard</th>
<th>Peak Hour</th>
<th>Existing</th>
<th>Existing Plus Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Winchester Boulevard and Stevens Creek Boulevard * (Protected)</td>
<td>D AM</td>
<td></td>
<td>33.3 C</td>
<td>33.4 C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>47.0 D</td>
<td>47.1 D</td>
</tr>
<tr>
<td>2</td>
<td>Santana Row and Stevens Creek Boulevard</td>
<td>D AM</td>
<td></td>
<td>13.3 B</td>
<td>13.3 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>27.4 C</td>
<td>27.4 C</td>
</tr>
<tr>
<td>3</td>
<td>Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard</td>
<td>D AM</td>
<td></td>
<td>7.5 A</td>
<td>7.7 A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>20.7 C</td>
<td>21.4 C</td>
</tr>
<tr>
<td>4</td>
<td>Monroe Street and Stevens Creek Boulevard (Protected)</td>
<td>D AM</td>
<td></td>
<td>29.7 C</td>
<td>29.7 C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>34.6 C</td>
<td>34.5 C</td>
</tr>
<tr>
<td>5</td>
<td>I-880 SB Ramps and Stevens Creek Boulevard *</td>
<td>D AM</td>
<td></td>
<td>23.8 C</td>
<td>23.9 C</td>
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<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>22.5 C</td>
<td>22.6 C</td>
</tr>
<tr>
<td>6</td>
<td>I-880 NB Ramps and Stevens Creek Boulevard</td>
<td>D AM</td>
<td></td>
<td>19.7 B</td>
<td>19.7 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM</td>
<td></td>
<td>21.1 C</td>
<td>21.1 C</td>
</tr>
</tbody>
</table>

* Denotes CMP Intersection

1 LOS standard shown in the table is based on the City of San Jose’s level of service policy. The LOS standard for CMP intersections is LOS E.
LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
4. Background Conditions

This chapter presents background traffic conditions, which are defined as conditions just prior to completion of the proposed project. It describes the planned transportation system, the procedure used to determine background traffic volumes, and the resulting traffic conditions. The background scenario predicts a realistic traffic condition that would occur as approved development gets built and occupied.

Background Transportation Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network with the exception of the following improvements:

**Winchester Boulevard and Stevens Creek Boulevard** – The planned improvement consists of addition of a second southbound left-turn lane at the intersection. The second southbound left-turn lane is to be completed with the approved expansion of the Valley Fair Shopping Center. The traffic associated with the Valley Fair expansion is included within the background volumes described below. It should be noted that the intersection of Winchester Boulevard and Stevens Creek Boulevard has been identified as a Protected Intersection. The LOS policy specifies that Protected Intersections consist of locations that have been built to their planned maximum capacity and where expansion of the intersection would have an adverse effect upon other transportation facilities (such as pedestrian, bicycle, and transit systems). The policy acknowledges that exceptions to the City’s LOS policy of maintaining a Level of Service D at local intersections will be made for certain Protected Intersections that have been built to their planned maximum capacity.

**Santana Row and Stevens Creek Boulevard** – As part of the approved expansion of the Valley Fair Shopping Center, this intersection will be restriped to provide one left-turn lane, one through lane, and one right-turn lane on the north and south approaches. The north and south approaches will be converted from split to protected phasing.

**Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard** – As part of the approved expansion of the Valley Fair Shopping Center, this intersection will be relocated from its current position to align with Baywood Avenue. The north approach at the relocated intersection will serve as the primary access point to Valley Fair Shopping Center and will be restriped to provide one left-turn lane and one shared left, through, and right-turn lane. Baywood Avenue will serve as the relocated intersection’s south approach. However, northbound Baywood Avenue will be restricted to right-turns only to/from Stevens Creek Boulevard.
Background Traffic Volumes

Background peak hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The added traffic from approved but not yet constructed developments was obtained from the City of San Jose’s Approved Trips Inventory (ATI) database included in Appendix B. The background traffic scenario predicts a realistic traffic condition that would occur as approved development is built. The following adjustments were made to the volumes under background conditions.

- The approved trips associated with the Valley Fair expansion were updated to reflect the latest project description and planned changes to site access.
- The approved trips associated with Santana Row Lot 11 project were also included under background conditions because most of the counts utilized in the analysis were collected prior to the completion of the project in 2017.

Background traffic volumes are shown Figure 8. The approved trips and traffic volumes for all components of traffic are tabulated in Appendix C.

Background Intersection Level of Service Analysis

The results of the intersection level of service analysis under background conditions summarized in Table 5.

City of San Jose Intersection Analysis

The results show that, measured against the City of San Jose level of service standard, the following two intersections are projected to operate at an unacceptable LOS F during the PM peak hour under background conditions.

1. Winchester Boulevard and Stevens Creek Boulevard * (CMP) (Protected)
2. Monroe Street and Stevens Creek Boulevard (Protected)

CMP Intersection Analysis

The results show that, measured against the CMP level of service standard, the intersection of Winchester Boulevard and Stevens Creek Boulevard is projected to operate at an unacceptable LOS F during the PM peak hour under background conditions.

All other study intersections are projected to operate at acceptable levels during both the AM and PM peak hours of traffic when measured against the City of San Jose and CMP level of service standards. The intersection level of service calculation sheets are included in Appendix D.
LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
Table 5
Background Intersection Levels of Service

<table>
<thead>
<tr>
<th>Int. #</th>
<th>Intersection</th>
<th>LOS Standard†</th>
<th>Peak Hour</th>
<th>Existing</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>AM</td>
<td>Avg.</td>
<td>LOS</td>
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<td>1</td>
<td>Winchester Boulevard and Stevens Creek Boulevard * (Protected)</td>
<td>D</td>
<td>33.3</td>
<td>C</td>
<td>34.8</td>
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<td>2</td>
<td>Santana Row and Stevens Creek Boulevard</td>
<td>D</td>
<td>13.3</td>
<td>B</td>
<td>12.6</td>
</tr>
<tr>
<td>3</td>
<td>Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard</td>
<td>D</td>
<td>7.5</td>
<td>A</td>
<td>10.6</td>
</tr>
<tr>
<td>4</td>
<td>Monroe Street and Stevens Creek Boulevard (Protected)</td>
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<td>29.7</td>
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<td>38.8</td>
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<td>5</td>
<td>I-880 SB Ramps and Stevens Creek Boulevard *</td>
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<td>23.8</td>
<td>C</td>
<td>28.3</td>
</tr>
<tr>
<td>6</td>
<td>I-880 NB Ramps and Stevens Creek Boulevard</td>
<td>D</td>
<td>19.7</td>
<td>B</td>
<td>21.2</td>
</tr>
</tbody>
</table>

* Denotes CMP Intersection
Bold indicates unacceptable level of service.
†LOS standard shown in the table is based on the City of San Jose's level of service policy. The LOS standard for CMP intersections is LOS E.
5. **Background Plus Project Conditions**

This chapter describes near-term traffic conditions that most likely would occur when the project is complete. It includes a description of the significance criteria used to establish what constitutes a project impact, a description of the transportation system under background plus project conditions, the method by which project traffic is estimated, and any impacts caused by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts. This traffic scenario represents a more congested traffic condition than the existing plus project scenario, since it includes traffic generated by approved projects in the area.

**Project Description**

The proposed development would consist of the replacement of two single-family homes on the project site with a hotel with up to 105 rooms. Access to the on-site parking garage will be provided via one full access driveway along Baywood Avenue.

**Background Plus Project Conditions Transportation Network**

It is assumed in this analysis that the transportation network under background plus project conditions would be the same as described under background conditions.

**Significant Impact Criteria**

Significance criteria are used to establish what constitutes an impact. Impacts on intersections are based on the significance criteria and thresholds of the jurisdiction in which the intersection is located.

*City of San Jose Definition of Significant Intersection Impacts*

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of San Jose if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

3. The level of service at a designated Protected Intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by two (2) or more seconds and the volume-to-capacity ratio (V/C) to increase by one-half percent (.005) or more.

An exception to criteria 2 applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by City of San Jose standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better at non-protected intersections.

Conformance to the CMP Standard

Based on CMP criteria, a project would fail to meet the CMP or County Expressway intersection standard if the additional project traffic caused one of the following during either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS E or better under background conditions to an unacceptable LOS F under project conditions, or

2. The level of service at the intersection is an unacceptable LOS F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e. the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a
new development. Project trip estimates are based on trip generation rates obtained from the Institute of Transportation Engineers’ (ITE’s) *Trip Generation*, Tenth Edition, 2017.

**Proposed Project Trip Generation**

Based on the recommended ITE trip generation rates for hotel land uses, the proposed 105-room hotel would generate 1,284 daily vehicle trips, with 65 trips (38 inbound and 27 outbound) occurring during the AM peak hour and 77 trips (38 inbound and 39 outbound) occurring during the PM peak hour.

**Existing Trip Generation**

Trips associated with the existing uses on the project site are subtracted from the estimated trips to be generated by the proposed project. There are currently two single-family homes on-site that will be replaced by the proposed project. Based on ITE trip generation rates, the existing houses generate 19 daily vehicle trips, with 1 trip (0 inbound and 1 outbound) occurring during the AM peak hour and 2 trips (1 inbound and 1 outbound) occurring during the PM peak hour.

**Net Project Trip Generation**

Based on the ITE trip generation rates and credit for existing use on the project site, it is estimated that the proposed project would generate a net additional 1,265 daily trips, with 64 trips (38 inbound and 26 outbound) occurring during the AM peak hour and 75 trips (37 inbound and 38 outbound) occurring during the PM peak hour. The trip generation estimates for proposed project are presented in Table 6.

**Trip Distribution and Assignment**

The trip distribution pattern for the proposed project was estimated based on traffic patterns on the surrounding roadway system and on the locations of complementary land uses. The project trip distribution pattern is shown graphically on Figure 9.

The peak-hour trips associated with the proposed project were added to the transportation network in accordance with the distribution pattern discussed above. Figure 10 shows the assignment of net project traffic on the local transportation network.

**Background Plus Project Traffic Volumes**

The project trips were added to background traffic volumes to obtain background plus project traffic volumes. The background plus project traffic volumes at the study intersections are shown graphically on Figure 11. Traffic volumes for all components of traffic are tabulated in Appendix C.
### Table 6
Project Trip Generation Estimates

| Land Use                      | ITE Land Use Code | Proposed Land Use | Hotel #310 - Occupied Hotel Rooms | 105 Rooms | 12.23 | 1,284 | 0.62 | 58% | 42% | 38 | 27 | 65 | 0.73 | 49% | 51% | 38 | 39 | 77 |
|-------------------------------|-------------------|-------------------|-----------------------------------|-----------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Proposed Land Use             |                   |                   | Residential #210 - Single-Family Detached Housing | 2 Dwelling Units | 9.44 | 19 | 0.74 | 25% | 75% | 0 | 1 | 1 | 0.99 | 63% | 37% | 1 | 1 | 2 |
| Net Project Trips (Proposed - Existing) |                   |                   |                                    |             | 1,265 | 38 | 26 | 64 | 37 | 38 | 75 |

Figure 9
Project Trip Distribution
### LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
Background Plus Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under background plus project conditions are summarized in Table 7.

City of San Jose Intersection Analysis

The results show that, measured against the City of San Jose level service standard, the following two intersections are projected to operate at an unacceptable LOS F during the PM peak hour under background plus project conditions.

1. Winchester Boulevard and Stevens Creek Boulevard (CMP) (Protected)
2. Monroe Street and Stevens Creek Boulevard (Protected)

Based on City of San Jose significance criteria, neither of the intersections identified to operate at unacceptable levels would be significantly impacted by the project.

CMP Intersection Analysis

The results show that, measured against the CMP level of service standard, the intersection of Winchester Boulevard and Stevens Creek Boulevard is projected to operate at an unacceptable LOS F during the PM peak hour under background plus project conditions. Based on CMP significance criteria, this intersection would not be significantly impacted by the project.

All other study intersections are projected to operate at acceptable levels during both the AM and PM peak hours of traffic when measured against the City of San Jose and CMP level of service standards. The intersection level of service calculation sheets are included in Appendix D.

Freeway Segment Capacity Evaluation

Per CMP technical guidelines, freeway segment level of service analysis shall be conducted on all segments to which the project is projected to add one percent or more to the segment capacity. Since the project is not projected to add one percent to any freeway segments in the area, freeway analysis for the CMP was not required. The percentage of traffic projected to be added by the project to freeway segments in the project area is summarized in Table 8.
### Table 7
**Background Plus Project Levels of Service**

<table>
<thead>
<tr>
<th>Int. #</th>
<th>Intersection</th>
<th>LOS Standard</th>
<th>Peak Hour</th>
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<th>Bay Background Plus Project</th>
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<td></td>
<td></td>
<td>AM</td>
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<td>34.8</td>
<td>C</td>
<td>34.9</td>
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<td>89.9</td>
<td>F</td>
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<td>C</td>
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<td></td>
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<td>B</td>
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</table>

* Denotes CMP Intersection

Bold indicates unacceptable level of service.

1 LOS standard shown in the table is based on the City of San Jose's level of service policy. The LOS standard for CMP intersections is LOS E.
Table 8
Freeway Segment Capacity

<table>
<thead>
<tr>
<th>#</th>
<th>Freeway Segment</th>
<th>Direction</th>
<th>Peak Hour</th>
<th>Mixed-Flow Lane</th>
<th>HOV Lane</th>
<th>Existing Plus Project</th>
<th>Project Trip</th>
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<td>Mixed-Flow Lane</td>
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<td>AM</td>
<td>15 3</td>
<td>6,900</td>
<td>--</td>
<td>--</td>
</tr>
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<td>3</td>
<td>I-880 from Stevens Creek Boulevard to North Bascom Avenue</td>
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<td>AM</td>
<td>10 3</td>
<td>6,900</td>
<td>--</td>
<td>--</td>
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<td>15 1</td>
<td>1,650</td>
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<td>AM</td>
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<td>6,900</td>
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<td>28 3</td>
<td>6,900</td>
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<td>48 3</td>
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</tr>
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<td></td>
<td>AM</td>
<td>64 3</td>
<td>6,900</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

6. Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions. Cumulative development typically includes projects that are in the pipeline (pending projects) but are not yet approved. It includes descriptions of nearby pending developments and the procedure used to estimate traffic volumes associated with them. Cumulative conditions reflect traffic conditions that would occur at the time that the proposed project is completed. The analysis of cumulative conditions is required by the CMP and in conformance with the California Environmental Quality Act CEQA.

Significant Impact Criteria

A significant cumulative traffic impact at an intersection is identified by comparing cumulative with project traffic conditions against background traffic conditions.

City of San Jose Definition of Significant Intersection Impacts

The cumulative projects collectively would create a significant adverse impact on traffic conditions at a signalized intersection in the City of San Jose if during either the AM or PM peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under cumulative conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of cumulative project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by 0.01 or more.
3. The level of service at a designated Protected Intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by two (2) or more seconds and the volume-to-capacity ratio (V/C) to increase by one-half percent (.005) or more.

An exception to criteria 2 applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by City of San Jose standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better at
non-protected intersections.

**Project Contribution to Cumulative Impacts**

A single project’s contribution to a cumulative intersection impact is deemed considerable in the City of San Jose if the proportion of project traffic represents 25 percent or more of the increase in total volume from background traffic conditions to cumulative traffic conditions.

**Cumulative Transportation Network**

The intersection lane configurations under cumulative conditions were assumed to be the same as described under background conditions.

**Cumulative Traffic Volumes**

Traffic volumes under cumulative conditions were estimated by adding the trips from approved developments, estimated project trips, and trips from proposed but not yet approved (pending) development projects. Cumulative conditions include trips generated by the following pending development projects in the immediate area of the proposed project:

- 2881 Hemlock Avenue Mixed-Use Development (San Jose) – 48 residential units and 19,130 s.f. of commercial space
- 335 South Winchester Boulevard Mixed-Use Development (San Jose) – 95,829 s.f. of commercial space and 13,157 s.f. of retail space
- Agrihood Residential Development (Santa Clara) – 165 affordable senior housing units, 36 townhome units, 160 apartment units, and 1,650-s.f. community café.

Figure 12 shows cumulative traffic volumes. Appendix C lists each of the components used to tabulate cumulative traffic volume at each intersection.

**Cumulative Intersection Level of Service Analysis**

The intersection level of service results under cumulative conditions are summarized in Table 9. The results show that, measured against the City of San Jose level of service impact criteria, the estimated cumulative project trips collectively would create a significant adverse traffic impact at the following two intersections located in the City of San Jose during the PM peak hour:

1. Winchester Boulevard and Stevens Creek Boulevard (CMP) (Protected)
4. Monroe Street and Stevens Creek Boulevard (Protected)

The addition of cumulative project trips at the remaining City of San Jose study intersections would not create a significant adverse traffic impact when measured against the City of San Jose level of service standard. The intersection level of service calculation sheets are included in Appendix D.

The project’s contribution in total volume from background traffic conditions to cumulative traffic conditions would be less than 25 percent at each of the intersections identified to be impacted by the total cumulative project trips. Therefore, the proposed project traffic will not result in a significant impact under cumulative conditions.
LEGEND:

XX(XX) = AM(PM) Peak-Hour Traffic Volumes
## Table 9
Cumulative Conditions Intersection Levels of Service

| Int. # | Intersection                                                  | LOS Standard | Peak Hour | Avg. Delay | LOS | Cumulative |  |  |  |  |  |  |  |
|--------|---------------------------------------------------------------|--------------|-----------|------------|-----|------------|---------------|---|---|---|---|---|---|---|
|        |                                                               |              |           |            |     | Background | Cumulative | % of Volume Increase |
|        |                                                               | D            | AM        | 34.8       | C   | 35.7       | D            | 4.0 | 0.027 | 7% |    |    |    |    |
|        |                                                               |              | PM        | 89.3       | F   | 98.3       | F            | 19.6 | 0.049 |    |    |    |    |    |
| 1      | Winchester Boulevard and Stevens Creek Boulevard * (Protected) | D            | AM        | 12.6       | B   | 12.6       | B            | 0.2  | 0.013 |    |    |    |    |    |
|        |                                                               |              | PM        | 29.7       | C   | 29.5       | C            | -0.2 | 0.016 |    |    |    |    |    |
| 2      | Santana Row and Stevens Creek Boulevard                      | D            | AM        | 10.6       | B   | 11.2       | B            | 0.1  | 0.013 |    |    |    |    |    |
|        |                                                               |              | PM        | 36.7       | D   | 38.0       | D            | 2.7  | 0.030 |    |    |    |    |    |
| 3      | Baywood Avenue/Valley Fair Entrance and Stevens Creek Boulevard | D            | AM        | 38.8       | D   | 40.2       | D            | 1.9  | 0.021 |    |    |    |    |    |
|        |                                                               |              | PM        | 128.6      | F   | 135.2      | F            | 9.7  | 0.023 | 24%|    |    |    |    |
| 4      | Monroe Street and Stevens Creek Boulevard (Protected)         | D            | AM        | 28.3       | C   | 29.0       | C            | 0.9  | 0.020 |    |    |    |    |    |
|        |                                                               |              | PM        | 25.5       | C   | 26.6       | C            | 2.6  | 0.029 |    |    |    |    |    |
| 5      | I-880 SB Ramps and Stevens Creek Boulevard *                 | D            | AM        | 21.2       | C   | 21.4       | C            | 0.2  | 0.014 |    |    |    |    |    |
|        |                                                               |              | PM        | 21.9       | C   | 22.2       | C            | 0.4  | 0.015 |    |    |    |    |    |

* Denotes CMP Intersection

Bold indicates unacceptable level of service. Bold and boxed indicate significant impact.

1. LOS standard shown in the table is based on the City of San Jose's level of service policy. The LOS standard for CMP intersections is LOS E.
7. Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project site, including:

- Potential impacts to transit, bicycle, and pedestrian facilities
- Site access and traffic operations under background plus project conditions

These other transportation issues were evaluated to determine if any deficiencies would exist under project conditions that may not be specifically linked to environmental impact reporting. These may not be considered environmental issues, and may not be evaluated in an environmental assessment, but have been included in the traffic study to meet the requirements of the local jurisdiction. Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community.

Site Access

A review of the project site plan was performed to determine if adequate site access and on-site circulation are provided and to identify any access or circulation issues that should be improved. This review is based on the site plan prepared by Carpira Design Group presented on Figure 2 and in accordance with generally accepted traffic engineering standards.

A three-level below-grade parking garage will provide on-site parking with one access point located along Baywood Avenue at the northern perimeter of the project boundary. The parking garage will provide a total of 70 parking spaces that include two handicap parking spaces on each of the three parking levels. The site plan indicates that the garage access point will provide one inbound lane and one outbound lane.

The driveway on Baywood Avenue is shown to be 24 feet wide. According to the City of San Jose municipal code, on-site drive aisles that serve two-way drive aisles should be 26 feet wide and driveway widths should match the 26 feet wide drive aisles. The project will be required to construct the Baywood Avenue driveway to meet the 26 feet wide city standard. Project trips at the project access point along Baywood Avenue are shown in Figure 13.
Figure 13
Traffic Volumes at Project Access

LEGEND
XX(XX) = AM(PM) Peak-Hour Traffic Volumes

17(24) 9(14) 25(24) 13(13)
Sight Distance at the Driveway Serving the Project

The driveway serving the project should be free and clear of obstructions, thereby ensuring that all exiting vehicles can see pedestrians on the sidewalk and vehicles travelling on Baywood Avenue. Adequate sight distance (sight distance triangles) should be provided at the driveway in accordance with Caltrans standards. Sight distance triangles should be measured approximately 10 feet back from the travelled way. Appropriate visible and/or audible warning signals should be provided at the project driveways to alert pedestrians and bicyclists of vehicles exiting the parking garage.

Providing appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway or locate sufficient gaps in traffic. Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is often considered the Caltrans stopping sight distance. Sight distance requirements vary depending on the roadway speeds. For the project driveway on Baywood Avenue, which has a speed limit of 25 miles per hour (mph), the Caltrans stopping sight distance is 150 feet. Thus, a driver must be able to see 150 feet in both directions on Baywood Avenue when turning out of the project driveway to avoid a collision. The proposed parking garage entrance will be located approximately 75 feet north of Hemlock Avenue. Therefore, the parking garage entrance will have adequate stopping sight distance to the north on Baywood Avenue. Given that vehicles must slow down to approximately 10 mph for the transition 90-degree curve from Hemlock Avenue to Baywood Avenue, the required stopping sight distance would reduce to 50 feet. Thus, the proposed garage entrance will also have adequate stopping sight distance to the south on Baywood Avenue.

Truck Access

A delivery area is shown on-site adjacent to the south side of the parking garage entrance on Baywood Avenue. Trash enclosures are shown to be located in the delivery area. Garbage trucks will not enter the delivery area. Therefore, trash bins will need to be wheeled out to Baywood Avenue through the loading/delivery area for garbage truck pickup. It is recommended that the use of the loading/delivery area be restricted during scheduled garbage pick-up times to ensure that access by garbage trucks is not inhibited.

On-Site Circulation

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards. Access to each level of parking will be provided via ramped circulation drive aisles that are accessed via the Baywood Avenue entrance. Based on the proposed site plan, on-site vehicular circulation will be efficient with simple rectangular circulation aisles within each parking level.

The City’s standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces. As shown on the site plan, the drive aisles with adjacent parking on each level measure 24 feet wide, which do not meet the City’s standard width. Drive aisles less than 26 feet are adequate, where parking is located on only one side of the drive aisle. Drive aisles less than 26 feet wide with parking on both sides will require City’s review and approval.

There is one proposed dead-end aisle at the end of the 3rd basement parking level. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic. All locations where dead-end aisles are provided should be dedicated for valet parking or employee use.
Overall, the site plan exhibits adequate site access for motor vehicles and large trucks. The City ultimately will determine the adequacy of the proposed driveways and internal on-site circulation design.

**Intersection Operations Analysis**

The operations analysis is based on vehicle queuing for high demand turning movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

\[ P(x=n) = \frac{\lambda^n e^{-\lambda}}{n!} \]

Where:

- \( P(x=n) \) = probability of “n” vehicles in queue per lane
- \( n \) = number of vehicles in the queue per lane
- \( \lambda \) = average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future left-turn storage requirements at intersections. The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Likewise, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the “design queue length”. The vehicle queue estimates and a tabulated summary of the findings are provided in Table 10. The vehicular queuing analysis (Poisson probability calculations) is included in Appendix E.

**Baywood Avenue and Stevens Creek Boulevard**

**Westbound Left-Turn**

The queuing analysis indicates that the maximum vehicle queue for the westbound left-turn pocket at the Baywood Avenue and Stevens Creek Boulevard intersection currently exceeds the existing vehicle storage capacity and will continue to do so under background and background plus project conditions during both the AM and PM peak hours.

The westbound left-turn pocket currently provides approximately 125 feet of vehicle storage, which can accommodate approximately five vehicles. The estimated 95th percentile vehicle queue for the westbound left-turn movement is projected to be approximately 7 and 10 vehicles during the AM and PM peak hours, respectively, under background conditions. The addition of project traffic would lengthen the projected vehicle queue by no more than two vehicles during the peak hours.

The westbound left-turn pocket at the Baywood Avenue and Stevens Creek Boulevard intersection will be modified along with the planned re-location of the intersection as part of the planned Valley Fair
expansion. The existing westbound left-turn pocket can be planned to provide the necessary 275 feet of storage by removing the existing median and trees along Stevens Creek Boulevard.

**Table 10**  
**Vehicle Queue and Left-turn Storage Capacity**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Baywood Avenue and Stevens Creek Boulevard Westbound Left-Turn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
</tr>
<tr>
<td><strong>Existing Conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Cycle Length (sec)</td>
<td>126</td>
</tr>
<tr>
<td>Lanes</td>
<td>1</td>
</tr>
<tr>
<td>Volume (vph)</td>
<td>27</td>
</tr>
<tr>
<td>Volume (vphpl)</td>
<td>27</td>
</tr>
<tr>
<td>95th %. Queue (veh/ln.)</td>
<td>3</td>
</tr>
<tr>
<td>95th %. Queue (ft./ln)(^1)</td>
<td>75</td>
</tr>
<tr>
<td>Storage (ft./ln.)</td>
<td>125</td>
</tr>
<tr>
<td>Adequate (Y/N)</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Background Conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Cycle Length (sec)</td>
<td>126</td>
</tr>
<tr>
<td>Lanes</td>
<td>1</td>
</tr>
<tr>
<td>Volume (vph)</td>
<td>112</td>
</tr>
<tr>
<td>Volume (vphpl)</td>
<td>112</td>
</tr>
<tr>
<td>95th %. Queue (veh/ln.)</td>
<td>7</td>
</tr>
<tr>
<td>95th %. Queue (ft./ln)(^1)</td>
<td>175</td>
</tr>
<tr>
<td>Storage (ft./ln.)</td>
<td>125</td>
</tr>
<tr>
<td>Adequate (Y/N)</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Background Plus Project Conditions</strong></td>
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<tr>
<td>Cycle Length (sec)</td>
<td>126</td>
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<tr>
<td>Lanes</td>
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</tr>
<tr>
<td>Volume (vph)</td>
<td>135</td>
</tr>
<tr>
<td>Volume (vphpl)</td>
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<td>95th %. Queue (veh/ln.)</td>
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<tr>
<td>95th %. Queue (ft./ln)(^1)</td>
<td>225</td>
</tr>
<tr>
<td>Storage (ft./ln.)</td>
<td>125</td>
</tr>
<tr>
<td>Adequate (Y/N)</td>
<td>NO</td>
</tr>
</tbody>
</table>

Notes:
\(^1\) Assumes 25 feet per vehicle queued
Signal Warrant Analysis

The need for signalization of an unsignalized intersection is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD), Part 4, Highway Traffic Signals, 2014. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Additional analysis may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other options such as traffic control devices, signage, or geometric changes may be preferable based on existing field conditions. The traffic signal warrant calculations are included in Appendix F.

Peak-hour traffic signal warrant checks indicate that the projected traffic volumes at the Redwood Avenue/Monroe Street intersection would fall below the thresholds that warrant signalization.

Transit Services

The project site is not directly served by any transit services other than the limited-stop 323 VTA bus line that has a stop at the intersection of Santana Row and Stevens Creek Boulevard approximately 1,000 to 1,400 feet northwest of the project site. Local bus line 60 operates along Winchester Boulevard. Bus stops for this line in the northbound and southbound directions are located near the Winchester Boulevard/Olin Avenue and Winchester Boulevard/Stevens Creek Boulevard intersections, respectively. It can be assumed that some guests/employees of the proposed hotel would utilize the existing transit service. Applying an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately two new transit riders during the AM peak hour and three during the PM peak hour. Assuming the existing transit service would remain unchanged with line 60 providing service with 15-20-minute headways during the peak commute periods at bus stops along Winchester Boulevard, the estimated number of new transit riders using the bus stops located near the project site would equate to no more than one new rider per bus during the peak hours. VTA operations reports indicate that the 60 bus line as well as several other bus lines in the project area serve less than ideal ridership. Therefore, the new riders due to the proposed project could be accommodated by the current available capacity of the bus service in the study area and improvement of the existing transit service would not be necessary with the project.

Bicycle and Pedestrian Facilities

Currently, there is no existing bike link between the project site and other existing bicycle facilities in the area. The San Jose Bike Plan 2020 and Envision 2040 General Plan, as described below, identify planned improvements to the bicycle network within the City and provide policies and goals that are intended to promote and encourage the use of multi-modal travel options and reduce the identified project impacts to the roadway system. The planned improvements to the bicycle network will provide the project site with improved connections to surrounding pedestrian/bike and transit facilities and a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies.

Pedestrian traffic primarily would consist of guests and employees of the proposed hotel development walking to and from surrounding retail establishments, as well as bus stops on Stevens Creek Boulevard and Winchester Boulevard. Crosswalks with pedestrian signal heads are located at all signalized intersections in the study area. All of the roadways in the vicinity of the project site have sidewalks on both sides of the street.
Public Transit/Pedestrian/Bike Improvements

The proposed project site is located within the Valley Fair/Santana Row Urban Village boundary. Sites within an Urban Village must incorporate additional urban design and architectural elements that will facilitate a building with pedestrian orientated design and activate the pedestrian public right-of-way.

The Envision 2040 General Plan identifies goals and policies that are dedicated to the enhancement of the transportation infrastructure, including public transit and pedestrian/bike facilities. The Transportation Policies contained in the General Plan create incentives for non-auto modes of travel while reducing the use of single-occupant automobile travel as generally described below:

- Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking, and transit facilities.
- Give priority to the funding of multimodal projects to provide the most benefit to all users of the transportation system.
- Encourage the use of non-automobile travel modes to reduce vehicle miles traveled (VMT)
- Consider the impact on the overall transportation system when evaluating the impacts of new developments.
- Increase substantially the proportion of travel modes other than single-occupant vehicles.

The planned improvements discussed below are intended to reduce single-occupant vehicle travel by providing the project site with viable connections to surrounding pedestrian/bike and transit facilities and provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies. However, the full implementation of the improvements are beyond the means of the proposed project given that they may require right-of-way from adjacent properties. The project could be required to make a fair-share contribution towards the cost of the improvements since the identified improvements would be of benefit to the project.

Bicycle and Pedestrian Facility Improvements

The Envision 2040 General Plan identifies the following goals in regard to bicycling and pedestrians:

- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments.
- Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
- Give priority to pedestrian improvement projects that improve pedestrian safety, improve pedestrian access to and within the Urban Villages and other growth areas.

The San Jose Bike Plan 2020 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

Class II bike lanes are planned for:

- Moorpark Avenue, between Thornton Way and College Drive
- Winchester Boulevard, between Moorpark Avenue and Payne Avenue
- Tisch Way, between Winchester Boulevard and Monroe Street
Transit Facility Improvements

The Envision 2040 General Plan identifies the following goals in regard to public transit:

- Pursue development of BRT, bus, shuttle, and fixed guideway services on designated streets and connections to major destinations.
- Ensure that roadways designated as Grand Boulevards adequately accommodate transit vehicle circulation and transit stops. Prioritize bus mobility along Stevens Creek Boulevard.

Stevens Creek Boulevard has been designated as a Grand Boulevard within the Envision 2040 General Plan. Grand Boulevards are intended to serve as major transportation corridors with priority given to public transit. There is a BRT line planned for the West San Carlos Street/Stevens Creek Boulevard corridor. The BRT will run on Stevens Creek Boulevard. Two BRT infrastructure solutions have been proposed: a single reversible transit-only lane between Winchester and MacArthur; and a dual-lane, transit-only overhead viaduct between Henry and MacArthur. The former option would include a center passing lane through the station loading areas, while the latter would include an aerial station.

The Stevens Creek Boulevard corridor serves as the primary access point to major retail/commercial destinations along Stevens Creek Boulevard and access to the area from the regional freeways of I-280 and I-880 is limited to their interchanges with Stevens Creek Boulevard. The proposed center lane BRT will require the removal of one travel lane in each direction of travel along a segment of Stevens Creek Boulevard between Winchester Boulevard and I-880 that is already congested. The removal of vehicular capacity along the primary travel corridor will result in a significant increase in congestion on the segment. Therefore, it is recommended that future BRT service along Stevens Creek Boulevard between Winchester Boulevard and I-880 be accommodated within the existing travel lanes.

The West San Carlos Street/Stevens Creek Boulevard BRT is in only the preliminary stages of its environmental review and there is no identified schedule for its completion.

Parking

Vehicle Parking

On-site parking would include 70 parking spaces within the three below-grade parking levels. Per the City of San Jose Municipal Code (Chapter 20.90.060) hotel land uses are required to provide one space per hotel room or suite plus one space per employee. Based on the City’s parking requirements and an estimated 10 hotel employees, the project is required to provide a total of 115 off-street parking spaces. The project is proposing a total of 70 parking spaces, which is a 39 percent reduction from the normal parking code. The project is located in the Valley Fair/Santana Row Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. A separate TDM plan has already been prepared for the proposed project. In accordance with Sections 20.70.330 and 20.90.220 of the San Jose Code of Ordinances, which allows up to a 50% parking reduction, the additional 19 percent reduction is allowed with the implementation and maintenance of a TDM plan. A separate TDM plan for the proposed project, dated April 26, 2018, has been prepared by Hexagon.

Santana Residential Parking Program (RPP)

The project site is located within the Santana Residential Parking Program (RPP) zone, where a permit is required to use on-street parking from 6PM to 7AM on weekdays and anytime on weekends and holidays. In order to obtain a parking permit, the applicant must live in or own a residential property or operate a business in a parking permit zone. Generally, this means that the residence or business must
be located on the same side of the street and block face where permit parking signs are posted. The locations of on-street parking, where a RRP permit is required, are shown on Figure 14.

**Bicycle Parking**

For hotel land uses, the City’s Bicycle Parking requirements require one bicycle parking space plus one space per 10 guest rooms. Based on the City’s Bicycle Parking requirements, the proposed project is required to provide 12 bicycle parking spaces to meet the City’s standards. The site plan indicates that the proposed project would include bike racks on the first below-grade parking level adjacent to the garage entrance. The proposed project should provide adequate bicycle parking to meet the City’s requirements.

**Transportation Demand Management**

The project will establish single-occupant auto trip reduction measures, via a travel demand management (TDM) program, that result in the reduction of vehicular trips to the project site and reduce the on-site parking shortage discussed above. The TDM program should encourage multimodal travel and use of the extensive bus service and pedestrian/bicycle facilities in the immediate project area to the maximum extent possible. The applicant/property owner should manage the TDM program to ensure tenant employee participation. An effective TDM program that includes several of the measures identified below can easily achieve a 25-50% percent reduction in vehicle trips that result in a reduction of the project’s parking demand. However, the analysis contained in this report does not include reductions based on TDM measures. Therefore, the estimates of trips to be generated by the proposed project as presented and evaluated within this study may represent an over-estimation of traffic and impacts associated with the proposed project. Implementation of a TDM Program has the potential to greatly reduce project generated traffic and the identified parking issues.

The project will be required to submit and have approved by the City its TDM program. The project TDM program may include, but would not be limited to, the following, or alternative equivalent, elements to reduce vehicle trips:

- **Eco Pass or Clipper Card** for all employees, providing free rides on Santa Clara County’s local transit agency, the Santa Clara Valley Transportation Authority (VTA)
- **25% Transit Subsidy** for transit agencies other than the VTA, including Caltrain, ACE, Capitol Corridor, BART, MUNI, and other
- **Monthly Vanpool Subsidy**
- **Commuter Tax Benefits** through WageWorks offering pre-tax deduction per month for transit and pre-tax deduction per month for parking
- **Free “Last Mile” Shuttles** to local train systems (e.g. Caltrain, Amtrak, ACE)
- **Free WiFi Commuter Buses** direct from areas like San Francisco and the TriValley area
- **Internal Carpool Matching Program** utilizing zip code matching
- **Regional Carpool Matching Program** through 511
- **Personalized Commute Assistance** offered by a Commute Coordinator
- **Preferred parking for Carpools and Vanpools** located near entrances to every building
- **Bicycle Lockers and/or Bicycle Racks** near entrances to every building
- **Showers** for cyclists and pedestrians, offering clean towel service, complimentary toiletries, hair dryers, and ironing boards
- **Intranet Site** featuring transit, bike, ridesharing and telework information
- **New Hire Orientation** presentations focusing on commute alternatives from Day 1
- **Centrally-Located Kiosks** with transit schedules, bike and transit maps, and other commute alternative information
- **Periodic Events** which connect employees with local transit agencies and transportation organizations (e.g. Spare the Air Fair, Bike to Work Day)
- **Onsite amenities** which allow employees to complete errands without a car, such as bicycle repair, dry cleaning, oil changes, carwash, haircuts, dental services, cafeteria, coffee bars, fitness center, massage services, mail and shipping services, convenience store, ATM, gift store
Figure 14

Santana Residential Parking Program Permit-Required Locations

LEGEND:

= Santana RPP Permit Required for Parking from 6PM to 7AM on Weekdays and Anytime on Weekends and Holidays.

= Project Site Location

Source: City of San Jose
8. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of San Jose and the Congestion Management Program (CMP) of Santa Clara County. The study included the analysis of AM and PM peak hour traffic conditions for six signalized intersections and one unsignalized intersection. Project impacts on other transportation facilities, such as bicycle facilities and transit service, were determined on the basis of engineering judgment.

Background Plus Project Intersection Level of Service Analysis

The results show the study intersections would not be significantly impacted by the project under background plus project conditions, according to the City of San Jose and CMP impact criteria.

Freeway Segment Capacity

Per CMP technical guidelines, freeway segment level of service analysis shall be conducted on all segments to which the project is projected to add one percent or more to the segment capacity. Since the project is not projected to add one percent to any freeway segments in the area, freeway analysis for the CMP was not required.

Cumulative Intersection Level of Service Analysis

The results show that, measured against the City of San Jose level of service impact criteria, the project’s contribution in total volume from background traffic conditions to cumulative traffic conditions would be less than 25 percent at all of the intersections identified to be impacted by the total cumulative project trips. Therefore, the proposed project traffic will not result in a significant impact under cumulative conditions.

Other Transportation Issues

Site Access

A three-level below-grade parking garage will provide on-site parking with one access point located along Baywood Avenue at the northern perimeter of the project boundary. The parking garage entrance on Baywood Avenue is shown to be 24 feet wide. According to the City of San Jose municipal code, on-site drive aisles that serve two-way drive aisles should be 26 feet wide and driveway widths should
match the 26 feet wide drive aisles. The project will be required to construct the Baywood Avenue driveway to meet the 26 feet wide city standard.

**On-Site Circulation**

The City’s standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces. As shown on the site plan, the drive aisles with adjacent parking on each level measure 24 feet wide, which do not meet the City’s standard width. Drive aisles less than 26 feet are adequate, where parking is located on only one side of the drive aisle. Drive aisles less than 26 feet wide with parking on both sides will require City’s review and approval.

There is one proposed dead-end aisle at the end of the 3rd basement parking level. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic. All locations where dead-end aisles are provided should be dedicated for valet parking or employee use.

Overall, the site plan exhibits adequate site access for motor vehicles and large trucks. The City ultimately will determine the adequacy of the proposed driveways and internal on-site circulation design.

**Intersection Operations Analysis**

**Baywood Avenue and Stevens Creek Boulevard**

**Westbound Left-Turn**

The queuing analysis indicates that the maximum vehicle queue for the westbound left-turn pocket at the Baywood Avenue and Stevens Creek Boulevard intersection currently exceeds the existing vehicle storage capacity and will continue to do so under background and background plus project conditions during both the AM and PM peak hours.

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The West San Carlos Street/Stevens Creek Boulevard BRT is in only the preliminary stages of its environmental review and there is no identified schedule for its completion.

**Parking**

**Vehicle Parking**

On-site parking would include 70 parking spaces within the three below-grade parking levels. Per the City of San Jose Municipal Code (Chapter 20.90.060) hotel land uses are required to provide one space per hotel room or suite plus one space per employee. Based on the City’s parking requirements and an estimated 10 hotel employees, the project is required to provide a total of 115 off-street parking spaces. The project is proposing a total of 70 parking spaces, which is a 39 percent reduction from the normal parking code. The project is located in the Valley Fair/Santana Row Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. A separate TDM plan has already been prepared for the proposed project. In accordance with Sections 20.70.330 and 20.90.220 of the San Jose Code of Ordinances, which allows up to a 50% parking reduction, the additional 19 percent reduction is allowed with the implementation and maintenance of a TDM plan. A separate TDM plan for the proposed project, dated April 26, 2018, has been prepared by Hexagon. The project will be required to submit and have approved by the City its TDM program.

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**Bicycle Parking**

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