HEXAGON TRANSPORTATION CONSULTANTS, INC.

Villa Del Sol Residential Mixed-Use Development

Local Transportation Analysis

Prepared for:

Pacific West Communities, Inc.

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Hexagon Transportation Consultants, Inc.
Hexagon Office: 4 North Second Street, Suite 400
San Jose, CA 95113
Hexagon Job Number: 20BJ08
Phone: 408.971.6100
Client Name: Pacific West Communities, Inc.

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Executive Summary

This report presents the results of the Local Transportation Analysis (LTA) conducted for the proposed affordable residential mixed-use development located at 1936 Alum Rock Avenue in San Jose, California. The project would redevelop the vacant 1.49-acre site with a 6-story building consisting of 194 affordable residential units (5 residential levels) over 1 level of parking and 3,000 square feet (s.f.) of ground level retail space. Access to the parking garage would be provided via Alum Rock Avenue and Tierra Encantada Way. A small amount of surface parking would also be provided at the south end of the site. Access to the surface parking spaces and emergency vehicle access would be provided via Tierra Encantada Way.

The project site is located within the Alum Rock Avenue Urban Village per the Envision San Jose 2040 General Plan. Urban Villages (planned growth areas) are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the General Plan's environmental goals. The project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards are designated as major transportation corridors that tie land uses within major transportation facilities. As a Grand Boulevard, the Santa Clara Street/Alum Rock Avenue Bus Rapid Transit (BRT) system operates along the corridor with BRT buses running in the median lanes on Alum Rock Avenue between 34th Street and Alexander Avenue.

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the mixed-use project (restricted affordable residential and local-serving retail) is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues that may arise due to the project. The LTA includes an evaluation of weekday AM and PM peak hour traffic conditions for three signalized intersections and two unsignalized intersections in the immediate vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects on transit, bicycle, and pedestrian facilities.

Local Transportation Analysis

Project Trip Generation

Vehicle trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The project trip generation

was reduced based on site location factors, applicable internal and external trip reductions, and project-specific factors in accordance with standard San Jose procedures. After applying the ITE trip rates and applicable trip reductions, the proposed project is estimated to generate 864 new daily vehicle trips, with 57 new trips (17 inbound and 40 outbound) occurring during the AM peak hour and 69 new trips (41 inbound and 28 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

The results of the analysis show that the signalized study intersections would operate at an acceptable level of service (LOS D) during both the AM and PM peak hours of traffic under all traffic scenarios.

Other Transportation Items

The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the area. The proposed site plan shows adequate site access and on-site circulation, and no significant operational issues are expected to occur as a result of the project. Below are recommendations resulting from the site plan review.

Recommendations

- Reduce the Tierra Encantada Way driveway width from 32 feet to the City-standard 26 feet.
- Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.
- Work with City staff to confirm the 24-foot internal drive aisle widths are acceptable.
- Assign all residential tandem parking stalls to individual residential units.
- Coordinate with City staff to verify whether 24 motorcycle parking spaces would be adequate to serve the project.

1. Introduction

This report presents the results of the local transportation analysis (LTA) conducted for the proposed affordable residential mixed-use development located at 1936 Alum Rock Avenue in San Jose, California (see Figure 1). The project would redevelop the vacant 1.49-acre site with a 6-story building consisting of 194 affordable residential units (5 residential levels) over 1 level of parking and 3,000 square feet (s.f.) of ground level retail space (see Figure 2). Access to the parking garage would be provided via Alum Rock Avenue and Tierra Encantada Way. A small amount of surface parking would also be provided at the south end of the site. Access to the surface parking spaces and emergency vehicle access would be provided via Tierra Encantada Way.

The project site is located within the Alum Rock Avenue Urban Village per the Envision San Jose 2040 General Plan. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the General Plan's environmental goals. 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 project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards are designated as major transportation corridors that tie land uses within major transportation facilities. As a Grand Boulevard, the Santa Clara Street/Alum Rock Avenue Bus Rapid Transit (BRT) system operates along the corridor with BRT buses running in the median lanes on Alum Rock Avenue between 34th Street and Alexander Avenue.

Study Purpose

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the project is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues related to the project.

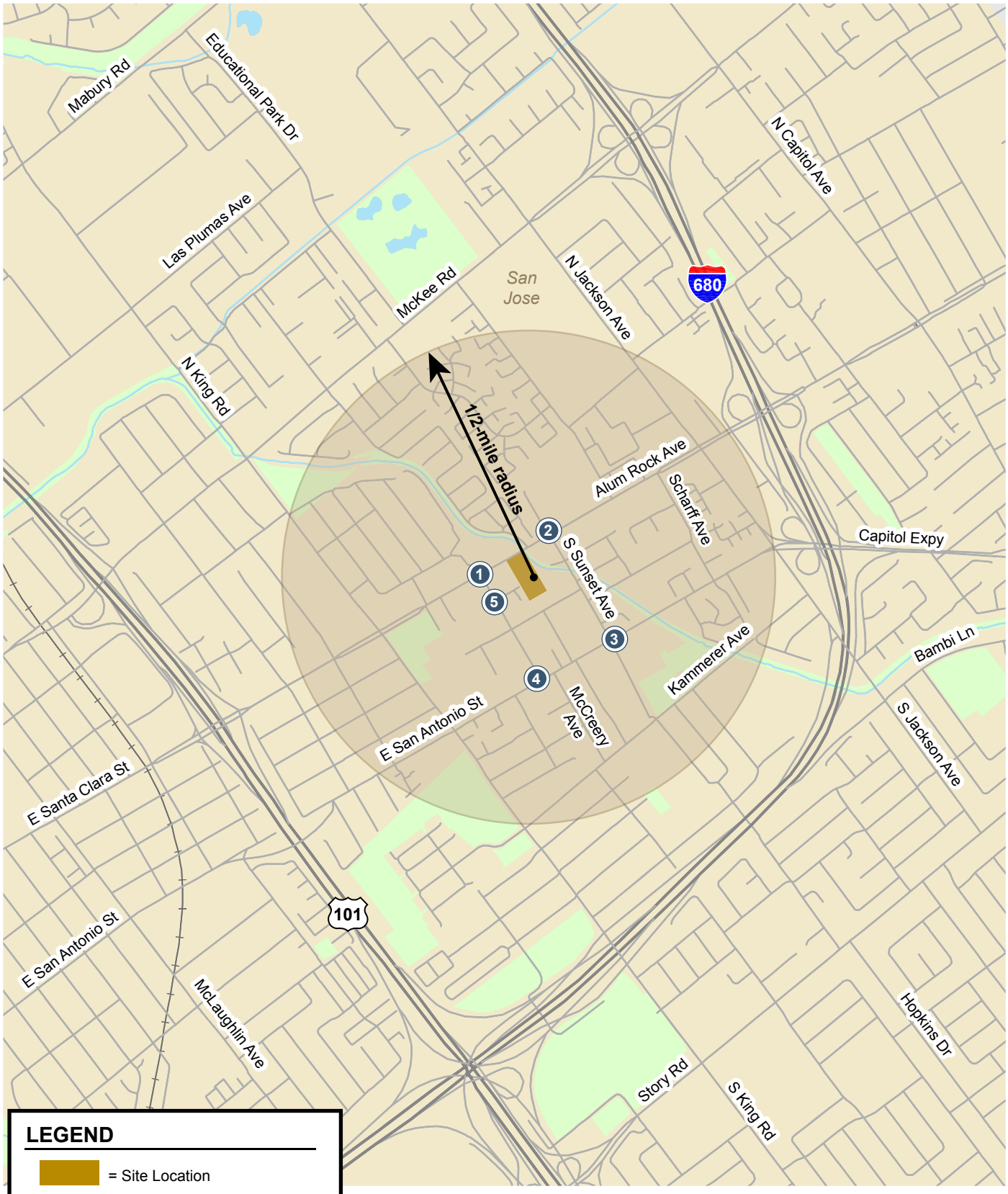


Figure 1
Site Location and Study Intersections

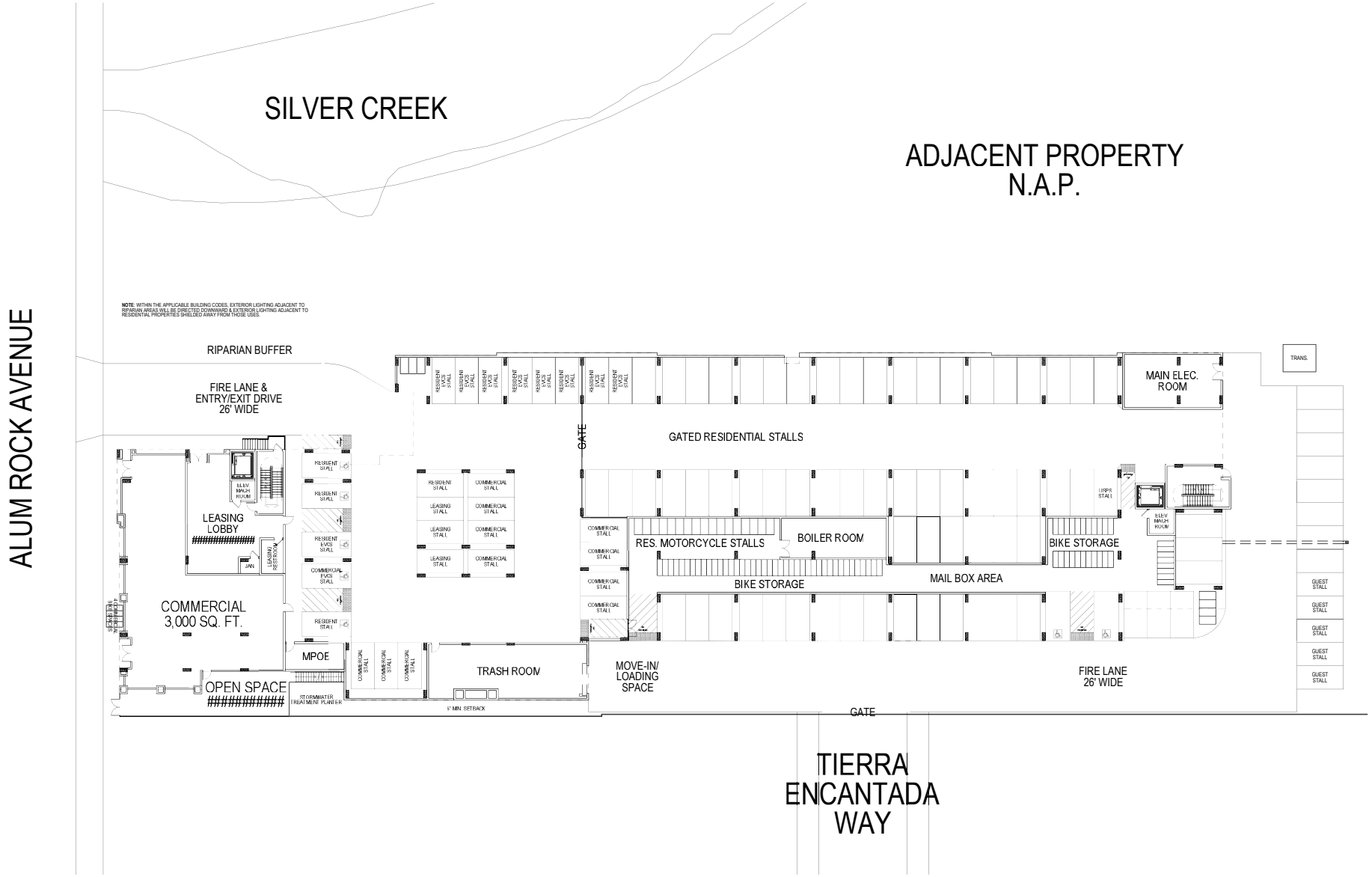


Figure 2
Site Plan

NORTH
Not to Scale

Transportation Analysis Policy

Historically, transportation analysis has utilized delay and congestion on the roadway system as the primary metric for the identification of traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections and in 2013 passed Senate Bill (SB) 743, which requires jurisdictions to stop using congestion and delay metrics, such as Level of Service (LOS), as the measurement for CEQA transportation analysis. With the adoption of SB 743 legislation, public agencies will soon be required to base the determination of transportation impacts on VMT rather than level of service.

In adherence to SB 743, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The policy replaces its predecessor (Policy 5-3) and establishes the thresholds for transportation impacts under the CEQA based on VMT instead of LOS. The intent of this change is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses.

The new transportation policy aligns with the currently adopted General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and supporting service land uses to internalize trips and reduce VMT. All new projects are required to analyze transportation impacts using the VMT metric and conform to Policy 5-1.

The Circulation Element of the *Envision San José 2040 General Plan* includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). These transportation goals and policies are intended to improve multi-modal accessibility to all land uses and create a city where people are less reliant on driving to meet their daily needs. The Envision San Jose 2040 General Plan contains the following policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT:

- Accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and VMT (TR-1.1);
- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- Increase substantially the proportion of commute travel using modes other than the single-occupant vehicle in order to meet the City's mode split targets for San Jose residents and workers (TR-1.3);
- Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Actively coordinate with regional transportation, land use planning, and transit agencies to develop a transportation network with complementary land uses that encourage travel by bicycling, walking and transit, and ensure that regional greenhouse gas emissions standards are met (TR-1.8);
- Give priority to the funding of multimodal projects that provide the most benefit to all users. Evaluate new transportation projects to make the most efficient use of transportation resources and capacity (TR-1.9);

- Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas) (TR-2.1);
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers that impede pedestrian and bicycle movement on City streets. Include consideration of grade-separated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the Mineta San Jose International Airport (TR-2.2);
- Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation (TR-2.5);
- Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements (TR-2.8);
- Coordinate and collaborate with local School Districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout San Jose (TR-2.10);
- As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute towards transit ridership, and require that new development is designed to accommodate and provide direct access to transit facilities (TR-3.3);
- Support the development of amenities and land use and development types and intensities that increase daily ridership on the VTA, BART, Caltrain, ACE and Amtrak California systems and provide positive fiscal, economic, and environmental benefits to the community (TR-4.1);
- Require large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees (TR-7.1);
- Promote transit-oriented development with reduced parking requirements and promote amenities around appropriate transit hubs and stations to facilitate the use of available transit services (TR-8.1);
- Balance business viability and land resources by maintaining an adequate supply of parking to serve demand while avoiding excessive parking supply that encourages auto use (TR-8.2);
- Support using parking supply limitations and pricing as strategies to encourage the use of non-automobile modes (TR-8.3);
- Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use (TR-8.4);
- Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive transportation demand management (TDM) program, or developments located near major transit hubs or within Urban Villages and other Growth Areas (TR-8.6);
- Within new development, create and maintain a pedestrian-friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and

by requiring pedestrian connections between building entrances, other site features, and adjacent public streets (CD-3.3);

- Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas (LU-9.1);
- Facilitate the development of housing close to jobs to provide residents with the opportunity to live and work in the same community (LU-10.5);
- Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location. Use the City's Parkland Dedication Ordinance and Park Impact Ordinance to have residential developers build trails when new residential development occurs adjacent to a designated trail location, consistent with other parkland priorities. Encourage developers or property owners to enter into formal agreements with the City to maintain trails adjacent to their properties (PR-8.5).

CEQA Transportation Analysis Scope

The City of San Jose's Transportation Analysis Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips with one end within the project. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service nearby.

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The project's VMT is then compared to the VMT thresholds of significance established based on the average area VMT. A project located in a downtown area is expected to have the project VMT lower than the average area VMT, while a project located in a suburban area is expected to generate project VMT higher than the average area VMT.

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, industrial, and retail projects with local traffic. The tool calculates a project's VMT and compares it to the appropriate thresholds of significance based on the project location (i.e., assessor's parcel number) and type of development. The thresholds of significance for development projects, as established in the Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the extent possible. For non-residential or non-office projects, very large projects or projects that can potentially shift travel patterns, the City's Travel Demand Forecasting Model can be used to determine project VMT.

Screening Criteria for VMT Analysis Exemption

The City of San Jose's *Transportation Analysis Handbook, 2018* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. The residential component of the proposed project, which is a restricted affordable residential development located within a Planned Growth Area (Alum Rock Avenue Urban Village) with low VMT and high-quality transit, meets the screening criteria set forth in the *Transportation Analysis Handbook.* The retail component of the project also meets the screening criteria. The City's screening criteria for CEQA transportation analysis for Restricted Affordable Residential Projects and Local-Serving Retail projects are described below.

Screening Criteria for Restricted Affordable Residential Projects

Affordability: 100% restricted affordable units, excluding unrestricted manager units; affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes; and

Planned Growth Areas: Located within a Planned Growth Area as defined in the Envision San Jose 2040 General Plan; and

High-Quality Transit: Located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and

Transit-Supporting Project Density:

- Minimum of 35 units per acre for residential projects or components;
- If located in a Planned Growth Area with a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; and

Transportation Demand Management (TDM): If located in an area in which the per capita VMT is higher than the CEQA significance threshold, a robust TDM Plan must be included; and

Parking:

- No more than the minimum number of parking spaces required;
- If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum; and

Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.

Screening Criteria for Local-Serving Retail

- 100,000 square feet of total gross floor area or less without drive-through operations.

The project would meet the screening criteria as follows:

- 100% affordable residential units;
- Located within the Alum Rock Avenue Urban Village (planned growth area);
- Located within ½ mile of high-quality transit (BRT);
- Residential density of 130 DU/AC;
- Located in an area in which the per capita VMT is lower than the CEQA significance threshold, thus, no TDM Plan is required (see VMT Evaluation Tool Summary Report in Appendix C);
- Parking would be provided at a reduced parking rate per Assembly Bill (AB) 744; and
- Retail is less than 100,000 square feet of total gross floor area with no drive-through.

Since both components of the project would meet the screening criteria, the project is expected to result in a less-than-significant VMT impact and no CEQA transportation analysis is required. Although the project is exempt from a VMT analysis, a Local Transportation Analysis (LTA) must be prepared to identify potential operational issues that may arise due to the project, as described below.

Local Transportation Analysis Scope

A local transportation analysis (LTA) identifies potential adverse operational effects that may arise due to a development project, evaluates the effects of the project on transportation, access, circulation, and related safety elements in the proximate area of the project, and typically supplements the VMT analysis.

As part of the LTA, a project is generally required to conduct an intersection operations analysis if the project is expected to add 10 or more vehicle trips per hour per lane to any signalized intersection that is located within a half-mile of the project site and is currently operating at LOS D or worse. City of San Jose staff may also require an intersection LOS analysis at their discretion based on engineering judgement. Based on these criteria, as outlined in the City's *Transportation Analysis Handbook,* a list of study intersections is developed. The LTA comprises an analysis of AM and PM peak-hour traffic conditions for the following 3 signalized intersections and 2 unsignalized intersections (see Figure 1):

Study Intersections:

1. McCreery Avenue and Alum Rock Avenue
2. Sunset Avenue and Alum Rock Avenue
3. Sunset Avenue and San Antonio Street
4. McCreery Avenue and San Antonio Street (unsignalized)
5. McCreery Avenue and Tierra Encantada Way (unsignalized)

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour generally occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. These are the peak weekday commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios: existing conditions, background conditions, background plus project conditions, and cumulative conditions. Traffic volumes for all scenarios are tabulated in Appendix A. The traffic scenarios are described in detail below.

- ***Existing Conditions.*** Due the current COVID-19 pandemic situation, the City of San Jose is requiring that all new traffic counts for study intersections be put on hold until further notice. Instead of conducting new 2020 counts, City staff are requesting that a compounded annual growth factor of 1% be applied to historical count data (i.e., any count that is more than one year old). Accordingly, a 1% annual growth factor was applied to the turning movement counts provided by City staff for this project.

- ***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 potential adverse operational effects of the project. The ATI sheets are contained in Appendix B.

- ***Background Plus Project Conditions***. Background plus project conditions reflect projected traffic volumes on the planned roadway network with completion of the project and approved developments. Background plus project traffic volumes were estimated by adding to background traffic volumes the additional traffic generated by the project.

- ***Cumulative Conditions.*** Cumulative traffic volumes were estimated by adding to background plus project traffic volumes additional traffic generated by pending (i.e., proposed but not approved) developments in the study area. For the purpose of this study, cumulative traffic

volumes include traffic generated by the following nearby pending projects: Sunset Alum Rock Mixed-Use Project (CP20-001, 3-16238) and Little Portugal Mixed-Use Project (PD18-016, 3-16968). This traffic scenario is provided for informational purposes at the request of the City of San Jose.

The LTA also includes a vehicle queuing analysis, an evaluation of potential project impacts on bicycle, pedestrian, and transit facilities, and a review of site access, on-site circulation, and parking demand.

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic conditions at the study intersections and the potential adverse operational effects due to the project. It includes descriptions of the data requirements, the analysis methodologies, the applicable intersection level of service standards, and the criteria used to determine adverse effects on intersection operations.

Data Requirements

The data required for the analysis were obtained from the City of San Jose and field observations. The following data were collected from these sources:

- existing traffic volumes
- existing lane configurations
- signal timing and phasing
- a list of approved projects

Intersection Level of Service Standards and Analysis Methodologies

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

The signalized study intersections 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 intersection operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of San Jose methodology employs the CMP defaults values for the analysis parameters. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average delay and level of service is shown in Table 1.

Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook, 2018*, an adverse effect on intersection operations would occur if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or better) under background conditions to an unacceptable level under background plus project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F) under background conditions and the addition of project trips cause 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.

The exception to this threshold is when the addition of project traffic reduces the amount of average control delay for critical movements, i.e., the change in average control delay for critical movements are negative. In this case, the threshold is when the project increases the critical v/c value by 0.01 or more.

Adverse effects at signalized intersections can be addressed by one of the following approaches:

- Construct improvements to the subject intersection or other roadway segments of the citywide transportation system to increase overall capacity, or
- Reduce project-generated vehicle trips (e.g., implement a "trip cap") to eliminate the adverse operational effects and restore intersection operations to background conditions. The extent of trip reduction should be set at a level that is realistically attainable through proven methods of reducing trips.

Table 1
Signalized Intersection of Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *2010 Highway Capacity Manual,* (Washington, D.C., 2010).

Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at intersections where the project would add 10 trips or more per lane to the left-turn movements or stop-controlled approaches. The queuing analysis is presented for informational purposes only, since the City of San Jose has not defined a policy related to queuing. 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
λ = average # of vehicles in the queue per lane (vehicles per hr per lane/signal cycles per hr)

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 for a particular left-turn 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 left-turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at intersections.

For signalized 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. Or, 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). Thus, turn pocket storage designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time for a signalized movement. Vehicle queuing at unsignalized intersections are evaluated based on the delay experienced at the specific study turn movement.

Report Organization

This report has a total of five chapters. Chapter 2 describes the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 presents the cumulative CEQA analysis, which evaluates the project's consistency with the Envision San Jose 2040 General Plan. Chapter 4 describes the local transportation analysis including the method by which project traffic is estimated, intersection level of service analysis for existing, background, background plus project, and cumulative conditions, any adverse intersection traffic effects caused by the project, an intersection queuing analysis, a site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and a parking evaluation. Chapter 5 presents the conclusions of the local transportation analysis.

2. Existing Conditions

This chapter describes the existing conditions of the transportation system within the project study area. It describes the roadway network, transit service, and pedestrian and bicycle facilities in the vicinity of the project site. The analysis of existing intersection operations is included as part of the local transportation analysis (see Chapter 4).

Existing Roadway Network

Regional access to the project site is provided via US 101 and I-680. Local access to the site is provided by Alum Rock Avenue, San Antonio Street, King Road, Jackson Avenue, McCreery Avenue, Sunset Avenue, and Tierra Encantada Way. These roadways are described below.

US 101 is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) in the vicinity of the site. US 101 extends northward through San Francisco and southward through Gilroy. Access to and from the site is provided via the Santa Clara Street/Alum Rock Avenue interchange.

I-680 is a north-south freeway that begins at US 101 in San Jose, where I-280 transitions to I-680, and ends at I-80 in Solano County. I-680 provides access to the project site via the Alum Rock Avenue interchange. The section of I-680 in the project vicinity is an eight-lane freeway, with four mixed-flow lanes in both directions.

Alum Rock Avenue is an east-west oriented Grand Boulevard that extends from US 101 to Alum Rock Park near the foothills in East San Jose with interchanges at US 101 and at I-680. Alum Rock Avenue is a Vision Zero Corridor, which is a commitment to prioritizing street safety and ensuring all road users – whether walking, biking, riding transit, or driving – are safe. Alum Rock Avenue has a posted speed limit of 30 mph and consists of four travel lanes with median transit lanes (i.e., BRT service) within the study area. Alum Rock Avenue has sidewalks on both sides of the street but has no bike lanes. Curb parking is allowed along the project frontage but is prohibited along most segments of Alum Rock Avenue. West of US 101, Alum Rock Avenue becomes Santa Clara Street and extends westward through Downtown San Jose. Alum Rock Avenue provides direct access to the project site.

San Antonio Street is an east-west two-lane Local Connector Street that extends from 17th Street eastward to Jackson Avenue, where it turns into Capitol Expressway. East of King Road, a center turn lane is provided on San Antonio Street with left-turn pockets at intersections. San Antonio Street has sidewalks, striped bike lanes and curb parking on both sides of the street in the study area. San Antonio Street has a posted speed limit ranging from 25 mph to 35 mph and provides access to and from the project site via McCreery Avenue.

King Road is a north/south City Connector Street with striped bike lanes that runs through east San Jose. To the north, King Road becomes Lundy Avenue near Berryessa Road, and to the south, King Road becomes Silver Creek Road near Capitol Expressway. King Road has sidewalks on both sides of the street and is four lanes wide south of Alum Rock Avenue and two lanes wide north of Alum Rock Avenue. Curb parking is allowed on both sides north of Alum Rock Avenue and on the west side of the street only south of Alum Rock Avenue in the study area. King Road has a posted speed limit of 35 mph. Access to the site from King Road is provided via Alum Rock Avenue.

Jackson Avenue is a north/south City Connector Street with a posted speed limit of 35 mph. It extends from Story Road in the south to Berryessa Road in the north, where it continues as Flickinger Avenue. Jackson Avenue has sidewalks and striped bike lanes on both sides of the street. It is a four-lane roadway with either left-turn lanes or a two-way center left-turn lane in the study area. Access to the site from Jackson Avenue is provided via Alum Rock Avenue from the north and San Antonio Street to McCreery Avenue from the south.

McCreery Avenue is a north-south two-lane Residential Street with sidewalks on both sides that extends from San Antonio Road northward to Alum Rock Avenue. Parking is allowed on both sides of the street. Access to the site from McCreery Avenue is provided via Tierra Encantada Way.

Sunset Avenue is a north-south two-lane Residential Street with sidewalks on both sides that extends northward from Lavonne Avenue and terminates 500 feet north of Alum Rock Avenue. Sunset Avenue is a designated bike route (contains Sharrows) south of San Antonio Street. Access to the site from Sunset Avenue is provided via Alum Rock Avenue and San Antonio Street to McCreery Avenue.

Tierra Encantada Way is an east-west two-lane Residential Street with sidewalks on both sides that extends eastward from McCreery Avenue and terminates at the western project boundary. Parking is allowed on the north side of the street only. The project will provide a driveway at the eastern end of Tierra Encantada Way.

Existing Pedestrian, Bicycle, and Transit Facilities

San Jose desires to provide a safe, efficient, fiscally, economically, and environmentally sensitive transportation system that balances the needs of bicyclists, pedestrians, and public transit riders with those of automobiles and trucks. The existing pedestrian, bicycle, and transit facilities in the study area are described below.

Existing Pedestrian Facilities

Pedestrian facilities in the project area consist primarily of sidewalks along streets and crosswalks with pedestrian signal heads at intersections. Sidewalks are found along all previously described streets in the study area. The signalized intersections in the vicinity of the project site have crosswalks on all or most legs, combined with pedestrian push button actuators and pedestrian signal heads. ADA ramps are also provided at all the intersections in the study area. The existing pedestrian facilities provide good connectivity between the site and the surrounding land uses and transit stops in the study area.

Existing Bicycle Facilities

Bicycle facilities in the study area include bike lanes and bike routes, as shown on Figure 3. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are existing streets that accommodate bicycles but are not separate from the existing travel lanes. Bike routes are typically designated only with signage or with painted shared lane markings (Sharrows) on a road that indicate to motorists that bicyclists may use the full travel lane.

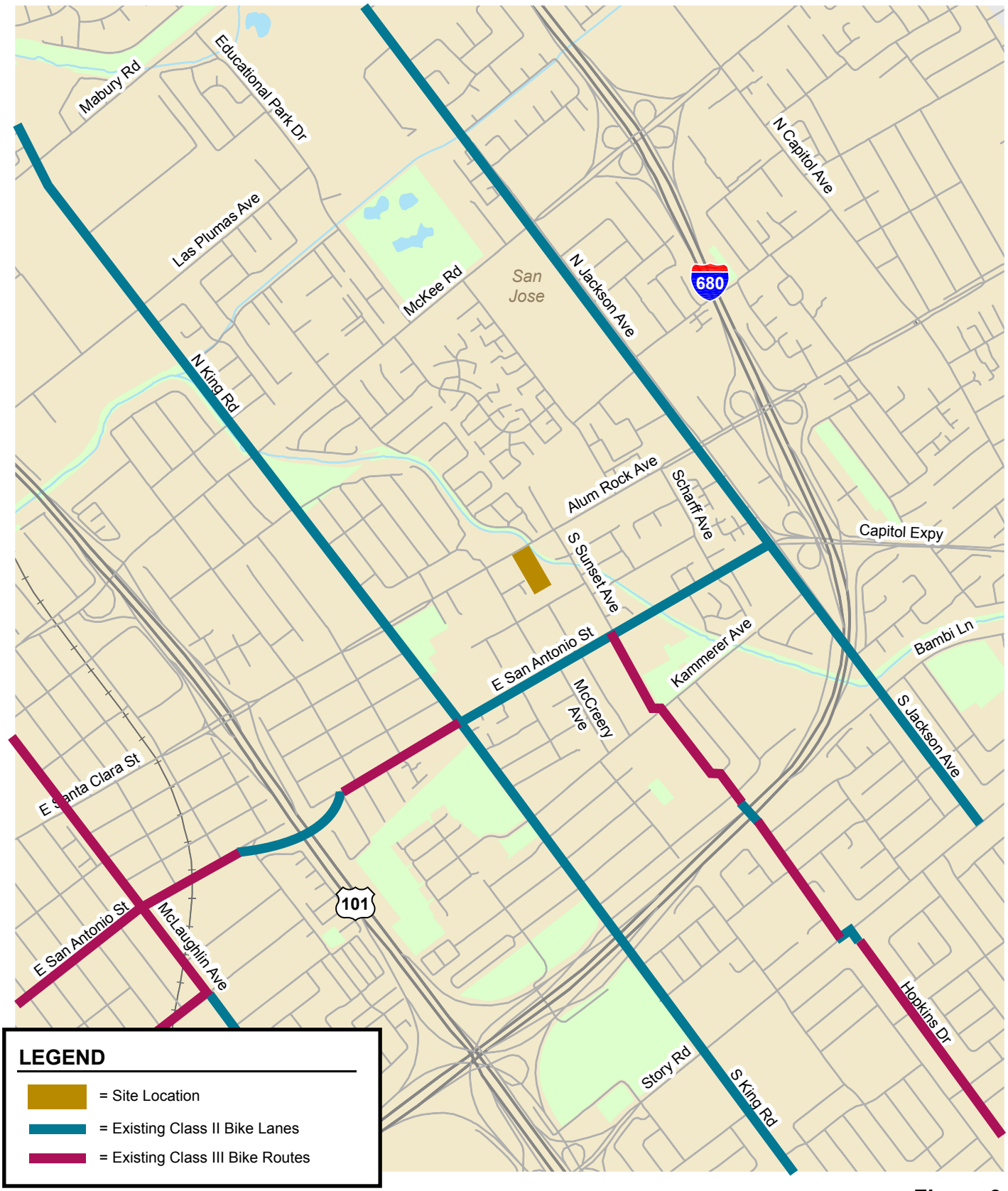


Figure 3
Existing Bicycle Facilities

Striped bike lanes are provided on the following roadway segments:

- King Road for its entirety;
- San Antonio Street between King Road and Jackson Avenue;
- Jackson Avenue between Story Road and Berryessa Road; and
- McLaughlin Avenue south of Williams Street.

Bike routes (Sharrow markings) are provided on the following roadway segments:

- Sunset Avenue south of San Antonio Street;
- San Antonio Street west of King Rd; and
- McLaughlin Avenue north of Williams Street.

Although there are no designated bike lanes or bike routes on streets in the immediate vicinity of the project site, McCreery Avenue, Sunset Avenue, Tierra Encantada Way, and Stowe Avenue all carry relatively low traffic volumes and are conducive to bicycle travel. Alum Rock Avenue is a Grand Boulevard with relatively high traffic volumes and no bicycle facilities. Thus, bicyclists should ride with caution on this street

Existing Transit Services

Existing transit service to the study area is provided by the VTA (see Figure 4). Eight bus routes provide service to the study area. All the VTA bus routes within the project vicinity and their headways are summarized in Table 2.

The bus stops closest to the project site are located at the McCreery Avenue/Alum Rock Avenue intersection and are served by Route 23. Stops for Bus Rapid Transit Routes 522 and 523 are located at the King Road/Alum Rock Avenue intersection, approximately 1,500 feet west of the project site.

Table 2
Existing Bus Service

Bus Route	Route Description	Headway [1]
Local Route 22	Palo Alto Transit Center to Eastridge Mall	15 - 20 min
Local Route 23	De Anza College to Alum Rock LRT Station	15 min
Local Route 64A	McKee Rd/White Rd to Ohlone-Chynoweth LRT Station	30 min
Local Route 64B	McKee/White to Almaden Expwy/Camden Av	60 min
Local Route 70	Milpitas BART Station to Eastridge Mall	20 min
Local Route 77	Milpitas BART Station to Eastridge Mall	30 min
Bus Rapid Transit 522	Palo Alto Transit Center to Eastridge Mall	15 - 20 min
Bus Rapid Transit 523	Berryessa BART Station to Lockheed Martin	15 - 20 min

Notes:
[1] Approximate headways during peak weekday commute periods.

Existing Intersection Lane Configuration

The existing lane configurations at the study intersections were provided by City of San Jose staff and verified by observations in the field (see Figure 5).

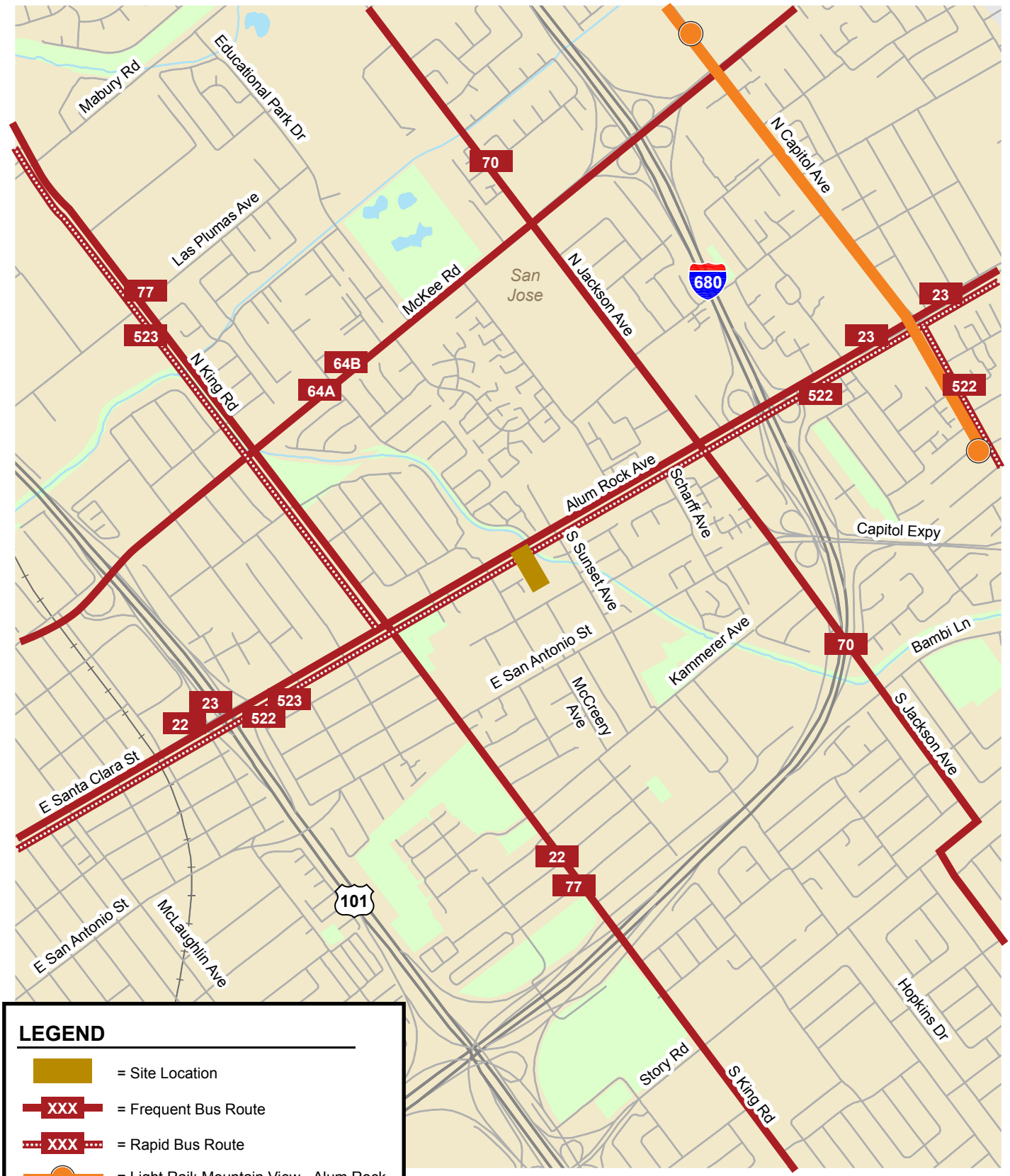


Figure 4
Existing Transit Services

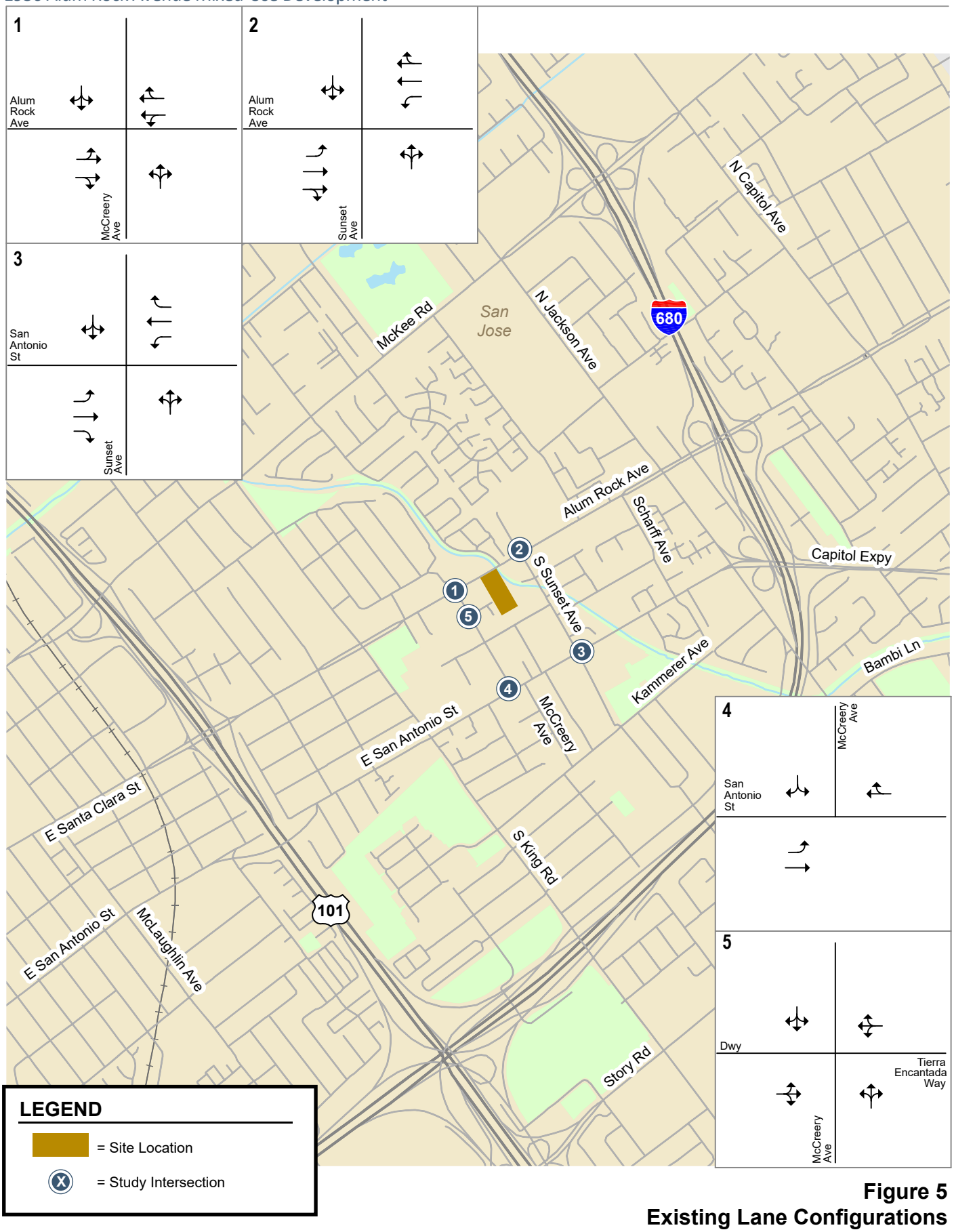


Figure 5
Existing Lane Configurations

3. Cumulative CEQA Analysis

This chapter presents the cumulative CEQA transportation analysis, which determines the project's consistency with the Envision San Jose 2040 General Plan. Factors that contribute to a determination of consistency with the City's General Plan include the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the City's *Transportation Analysis Handbook*.

Project Consistency with the General Plan

The project site is designated Urban Village on the Land Use/Transportation Diagram of the Envision San Jose 2040 General Plan. Urban Villages are one of the twelve Major Strategies identified in the General Plan and are intended to accommodate higher density housing and significant job growth. The Urban Village designation allows for a density of up to 250 dwelling units per acre (DU/AC) and a floor area ratio (FAR) of up to 10.0. As proposed, the 194-unit residential project would have a density of approximately 130 DU/AC: 194 Units / 1.49 acres = 130.20 DU/AC. Therefore, the project is consistent with the City's General Plan designation.

Zoning Consistency

The project site is in the Main Street Ground Floor Commercial District (MS-G). This district provides for uses such as retail, private instruction, and medical offices. Mixed-use projects, such as the proposed project, also are allowed within this zoning designation with a conditional use permit. Accordingly, the project plans to apply for a conditional use permit to be consistent with the zoning.

Project Design and Characteristics

- The residential mixed-use project would be located within walking distance of multiple bus stops, which would contribute toward the following:
    - Increase in the proportion of commute travel using modes other than the single-occupant vehicle (SOV);
    - Increase in daily transit ridership in the area; and
    - Provide environmental benefits to the community due to the project's proximity to transit.
- The project would be integrated with the City's transportation system, including transit, roads, and pedestrian facilities.
- The project would be located in an area consisting of a mix of households and jobs (Alum Rock Avenue Urban Village), which would provide new residents with the opportunity to live and work in the same community.

- The project would not negatively impact existing transit, bicycle or pedestrian infrastructure.

Conformance to the General Plan Goals and Policies

- The project would not conflict with any applicable land use plans, policies, or regulations.
- The project would not conflict with any adopted plans or policies for new transit, bicycle or pedestrian facilities.

The proposed project is consistent with the 2040 General Plan and a General Plan Amendment (GPA) is not required. The project is considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

4.
Local Transportation Analysis

This chapter describes the local transportation analysis including the method by which project traffic is estimated, intersection operations analysis, any adverse intersection traffic effects caused by the project, site access and on-site circulation review, effects on bicycle and pedestrian facilities, effects on transit services, and parking.

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of intersections in the project vicinity and to identify potential adverse effects due to the addition of project traffic. Information required for the intersection operations analysis related to project trip generation, trip distribution, and trip assignment are presented in this section. The study intersections are located in the City of San Jose and are evaluated based on the City of San Jose's intersection analysis methodology and standards in determining potential adverse operational effects due to the project, as described in Chapter 1.

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, the directions to and from which the project trips would travel are estimated. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Trips generated by any new development are typically estimated based on counts of existing developments of the same land use types. A compilation of typical trip generation rates can be found in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The "Multifamily Housing Mid-Rise" ITE land use category includes apartment, townhouse and condominium developments with a total of at least four (4) dwelling units and that have between three (3) and ten (10) levels. The project as proposed includes five stories of residential units over one story of ground level parking and retail space. The ITE rates for Shopping Center are commonly used for projects such as this if the specific retail land uses are not known at the time the traffic study is being prepared, since shopping centers typically contain a wide range of retail land uses.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2018, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation described above. The applicable trip adjustments and reductions are described below.

Internal Mixed-Use Trip Reduction

In accordance with VTA's *Transportation Impact Analysis Guidelines* (October 2014, Section 8.2.1, "Standard Trip Reductions"), a 15% residential/retail mixed-use trip reduction can be applied to account for the internalization of trips between the two land uses. The 15% reduction is first applied to the smaller trip generator (retail use). The same number of trips are then subtracted from the larger trip generator (residential use) to account for both internal trip ends.

Location-Based Trip Adjustment

Based on the 2018 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the "place type" in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool. Based on the tool, the project site is located within a designated Urban Low Transit place type. Therefore, the baseline project trips were adjusted to reflect an Urban Low Transit mode share. Residential and retail developments within Urban Low Transit areas have a vehicle mode share of 87% (according to Table 6 of the City's *Transportation Analysis Handbook*). Thus, a 13% reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the San Jose Travel Demand Model. The VMT Evaluation Tool Summary Report is contained in Appendix C.

Project-Specific Residential Trip Reduction

According to the *Transportation Analysis Handbook*, the VMT reduction resulting from implementing the VMT reduction strategies in the evaluation tool should be included as part of the trip generation estimates. The standard VMT reduction strategies include the following project characteristics: Increase Residential Density, Increase Employment Density, Increase Development Diversity, and Integrate Affordable and Below Market Rate units. The VMT Evaluation Tool calculated a 12% external trip reduction based on the project's mix of increased residential density, increased development diversity, and affordable residential units.

Retail Pass-By Trip Reduction

A pass-by trip reduction can be applied to the net peak hour trip generation estimates for the proposed ground floor retail space. Pass-by-trips are trips that would already be on the adjacent roadways (and so are already counted in the background traffic) but would turn into the site while passing by. Justification for applying the pass-by-trip reduction is founded on the observation that such retail traffic is not actually generated by the retail use but is already part of the ambient traffic levels. A PM peak hour pass-by trip reduction of 34% was applied to the ground floor retail space based on the ITE *Trip Generation Handbook* (Third Edition) for the Shopping Center land use. No AM peak hour pass-by trip reduction is provided for in the handbook. A daily pass-by trip reduction of 17% was calculated based on the average of the AM (0%) and PM (34%) pass-by trip reduction percentages.

Net Project Trips

After applying the ITE trip rates and applicable trip reductions described above, the proposed project is estimated to generate 864 new daily vehicle trips, with 57 new trips (17 inbound and 40 outbound) occurring during the AM peak hour and 69 new trips (41 inbound and 28 outbound) occurring during the PM peak hour (see Table 3).

Table 3
Project Trip Generation Estimates

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour Pk-Hr Rate	AM In	AM Out	AM Total	PM Peak Hour Pk-Hr Rate	PM In	PM Out	PM Total
Proposed Uses											
Apartments [1]	194 DU	5.44	1,055	0.36	19	51	70	0.44	52	33	85
Residential & Retail Internal Capture (15%) [3]			*(17)*		*0*	*0*	*0*		*(1)*	*(1)*	*(2)*
Location-Based Vehicle Mode Share (13%) [4]			*(135)*		*(2)*	*(7)*	*(9)*		*(7)*	*(4)*	*(11)*
Project-Specific Trip Reduction (12%) [5]			*(108)*		*(2)*	*(5)*	*(7)*		*(5)*	*(3)*	*(8)*
Residential Subtotal:			795		15	39	54		39	25	64
Retail [2]	3,000 s.f.	37.75	113	0.94	2	1	3	3.81	5	6	11
Residential & Retail Internal Capture (15%) [3]			*(17)*		*0*	*0*	*0*		*(1)*	*(1)*	*(2)*
Location-Based Vehicle Mode Share (13%) [4]			*(13)*		*0*	*0*	*0*		*(1)*	*(1)*	*(2)*
Retail Pass-By External Trip Reduction [6]			*(14)*		*0*	*0*	*0*		*(1)*	*(1)*	*(2)*
Retail Subtotal:			69		2	1	3		2	3	5
Net New Trips:			**864**		**17**	**40**	**57**		**41**	**28**	**69**

Notes:
[1] Trip generation based on average rates contained in the *ITE Trip Generation Manual, 10th Edition*, for Multifamily Housing Mid-Rise (Land Use 221) located in a General Urban/Suburban setting. Rates are expressed in trips per dwelling unit (DU).
[2] Trip generation based on average rates contained in the *ITE Trip Generation Manual, 10th Edition*, for Shopping Center (Land Use 820) located in a General Urban/Suburban setting. Rates are expressed in trips per 1,000 square feet (s.f.).
[3] A 15% residential/retail internal mixed-use trip reduction was applied to the project per the 2014 Santa Clara VTA TIA Guidelines. The 15% reduction was first applied to the smaller generator (retail). The same number of trips were subtracted from the larger generator (residential) to account for both trip ends.
[4] A 13% reduction for the residential and retail components of the project was applied based on the location-based vehicle mode share percentage outputs (Table 6 of TA Handbook) produced from the San Jose Travel Demand Model for the place type Urban Low Transit.
[5] A 12% reduction for the residential component of the project was applied based on the external trip adjustments obtained from the City's VMT Evaluation Tool.
[6] The PM peak hour pass-by trip reduction percentage (34% for Shopping Center) was based on the ITE Trip Generation Handbook (Third Edition). There is no AM peak hour pass-by trip reduction. The daily pass-by trip reduction (17%) was calculated based on the average of the AM and PM pass-by reduction percentages.

Trip Distribution and Assignment

The residential and retail trip distribution patterns for the project were estimated based on existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM peak commute patterns, the locations of complementary land uses, previous traffic studies in the area, and freeway access points. The peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution patterns for each land use.

Figure 6 shows the residential project trip distribution pattern and trip assignment. Figure 7 shows the trip distribution pattern and trip assignment for the retail component of the project. The total project trip assignment is shown on Figure 8.

Traffic Volumes Under All Scenarios

Existing Traffic Volumes

Since the institution of shelter-in-place orders due to the COVID-19 pandemic, most businesses and schools are closed, and people are working at home to the extent possible. As a result, existing traffic volume is a fraction of what it was prior to the virus outbreak. It is not known when traffic levels will return to pre-virus conditions, since many people may be unemployed for an extended period of time. Even though many businesses have reopened, people with health concerns may be reluctant to venture outside their homes. As a result, traffic volume is expected to remain reduced for many months.

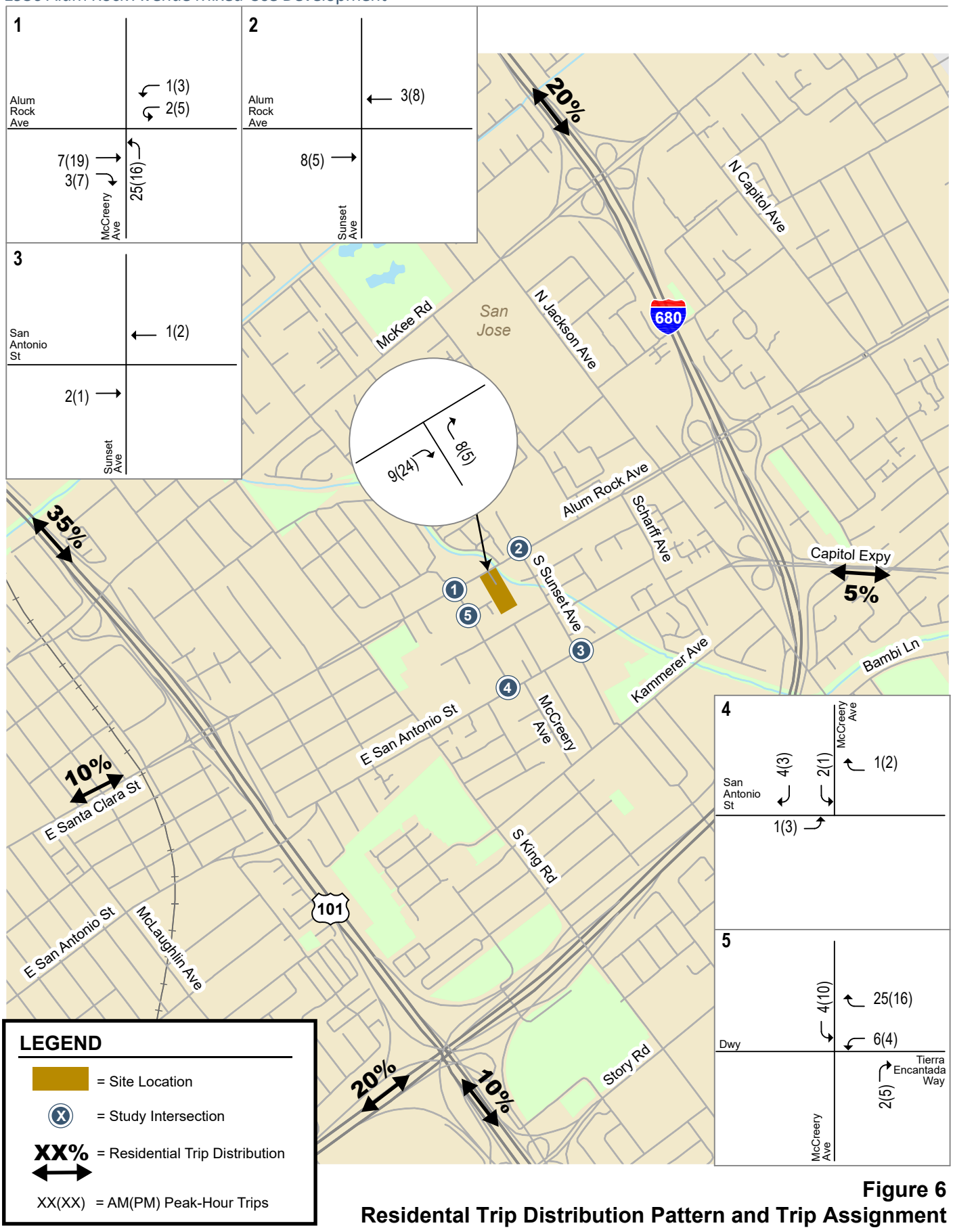


Figure 6
Residental Trip Distribution Pattern and Trip Assignment

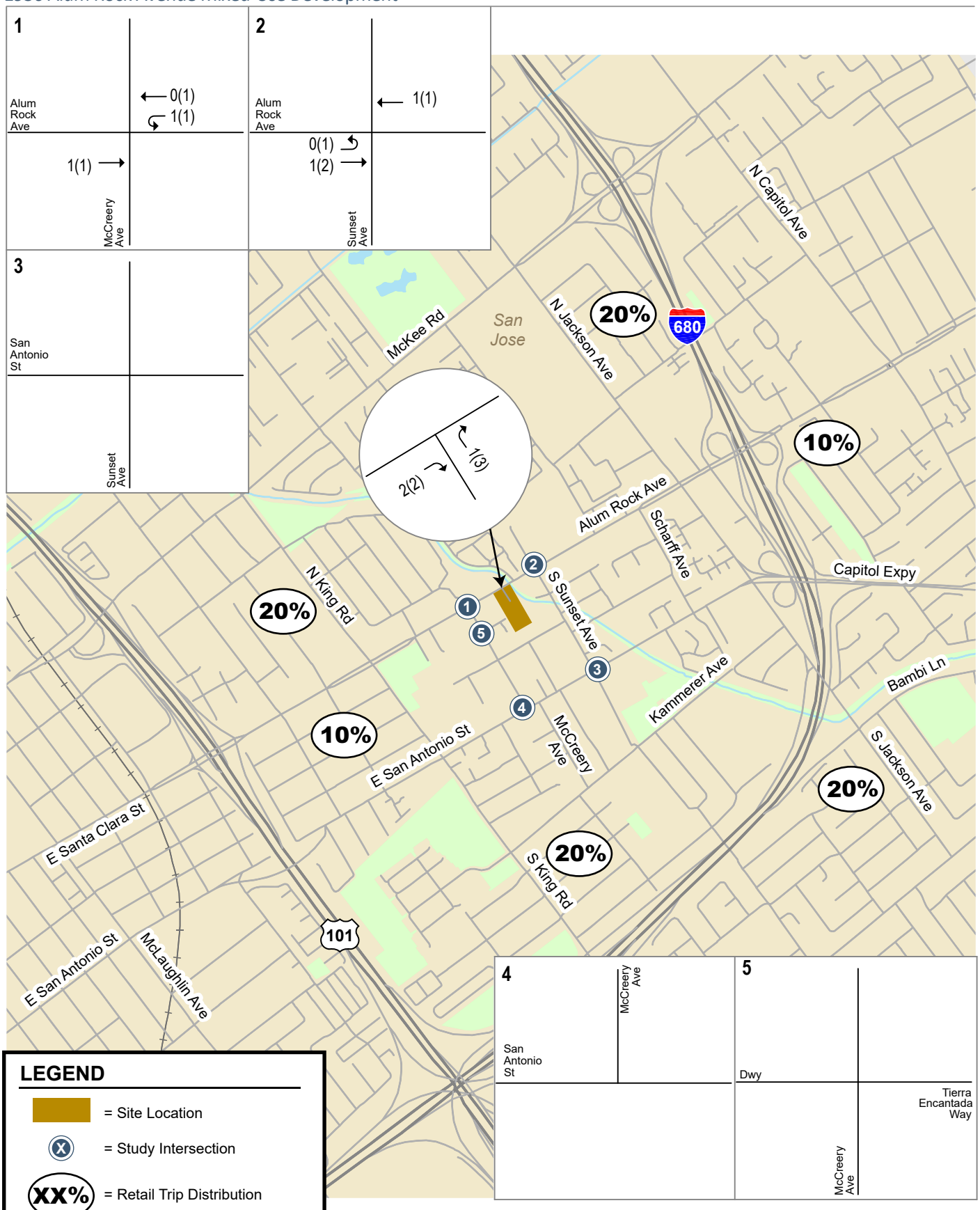


Figure 7
Retail Trip Distribution Pattern and Trip Assignment

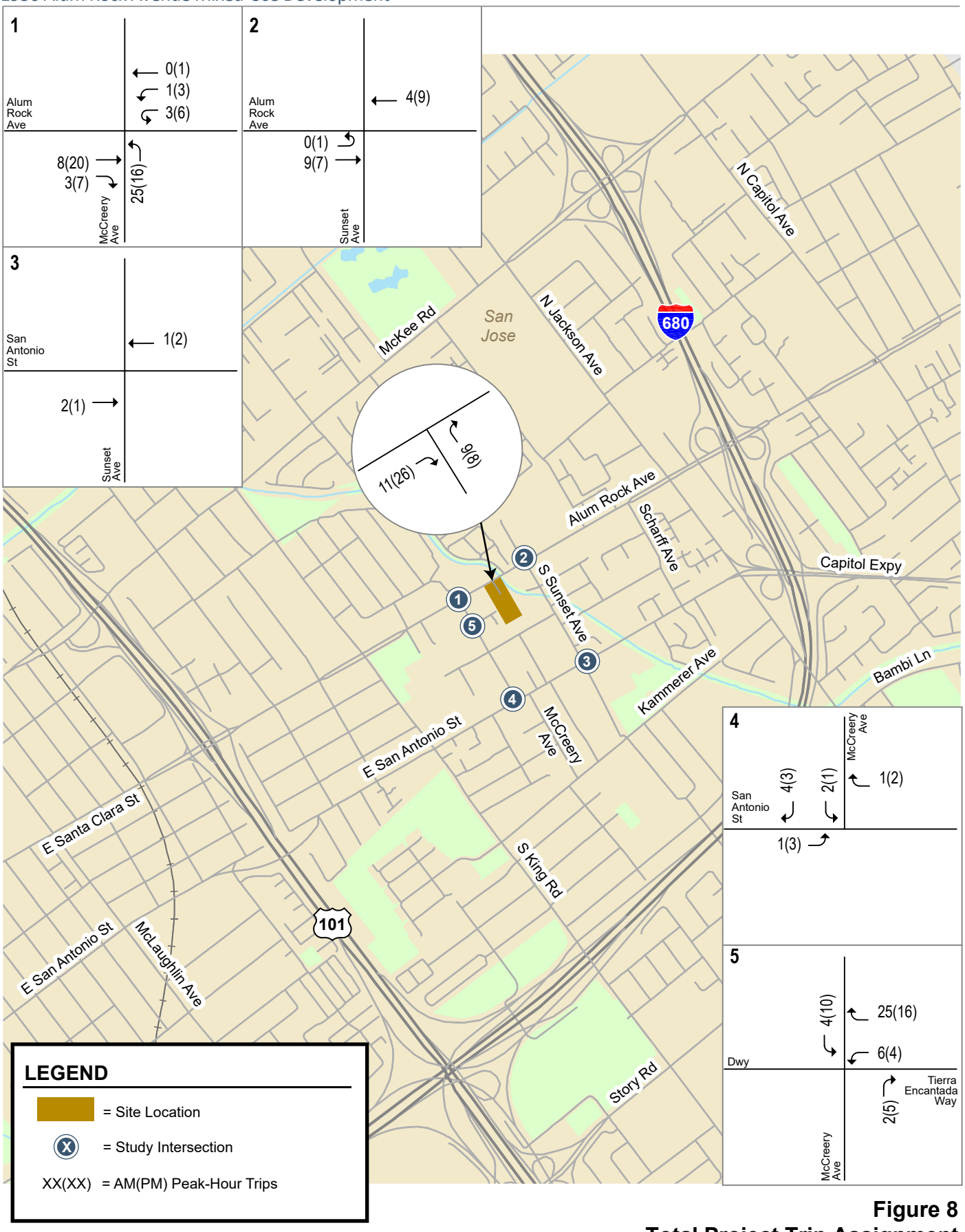


Figure 8
Total Project Trip Assignment

In response to the current situation, the City of San Jose is requiring that all new traffic counts for study intersections be put on hold until further notice. Instead of conducting new 2020 counts, City staff are requesting that a compounded annual growth factor of 1% be applied to historical count data (i.e., counts that are more than one year old). In Hexagon's experience, this is a typical annual growth factor. Accordingly, a 1% annual growth factor was applied to the turning movement counts provided by City staff for this project. This approach allows transportation studies such as this to move forward without waiting for conditions to return to "normal". The existing traffic volumes are shown on Figure 9.

Background Traffic Volumes

Background AM and PM peak hour traffic volumes were estimated by adding to existing traffic volumes the trips generated by nearby approved but not yet completed or occupied projects (see Figure 10). The approved projects are listed as part of the Approved Trips Inventory (ATI) contained in Appendix B.

Background Plus Project Traffic Volumes

Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 11).

Cumulative Traffic Volumes

Cumulative traffic volumes were estimated by adding to background plus project traffic volumes additional traffic generated by pending developments (i.e., proposed but not approved developments) in the study area. For the purpose of this study, cumulative traffic volumes include traffic generated by the following nearby pending projects: Sunset Alum Rock Mixed-Use Project (CP20-001, 3-16238) and Little Portugal Mixed-Use Project (PD18-016, 3-16968). The cumulative traffic volumes are shown on Figure 12.

Traffic volumes for all traffic scenarios are tabulated in Appendix A.

Intersection Traffic Operations

Signalized intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that the signalized study intersections are currently operating at an acceptable level of service (LOS D or better) during both the AM and PM peak hours of traffic, and would continue to do so under background, background plus project, and cumulative conditions (see Table 4).

The detailed intersection level of service calculation sheets are included in Appendix D.

Table 4
Signalized Intersection Level of Service Summary

				Existing		Background		Background Plus Project				Cumulative	
ID	Signalized Intersection	Peak Hour	Count Date	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C	Avg. Delay (sec)	LOS
1	McCreery Av & Alum Rock Av	AM	10/18/11	30.9	C	31.6	C	32.9	C	1.4	0.020	33.1	C
		PM	10/18/11	32.9	C	33.3	C	34.3	C	1.0	0.021	34.9	C
2	Sunset Av & Alum Rock Av	AM	10/02/14	27.4	C	27.3	C	27.3	C	0.0	0.001	27.1	C
		PM	10/02/14	20.5	C	20.5	C	20.4	C	-0.1	0.002	20.8	C
3	Sunset Av & San Antonio St	AM	05/09/19	19.8	B	19.8	B	19.9	B	0.0	0.001	19.9	B
		PM	05/09/19	17.4	B	17.4	B	17.4	B	0.0	0.001	17.5	B

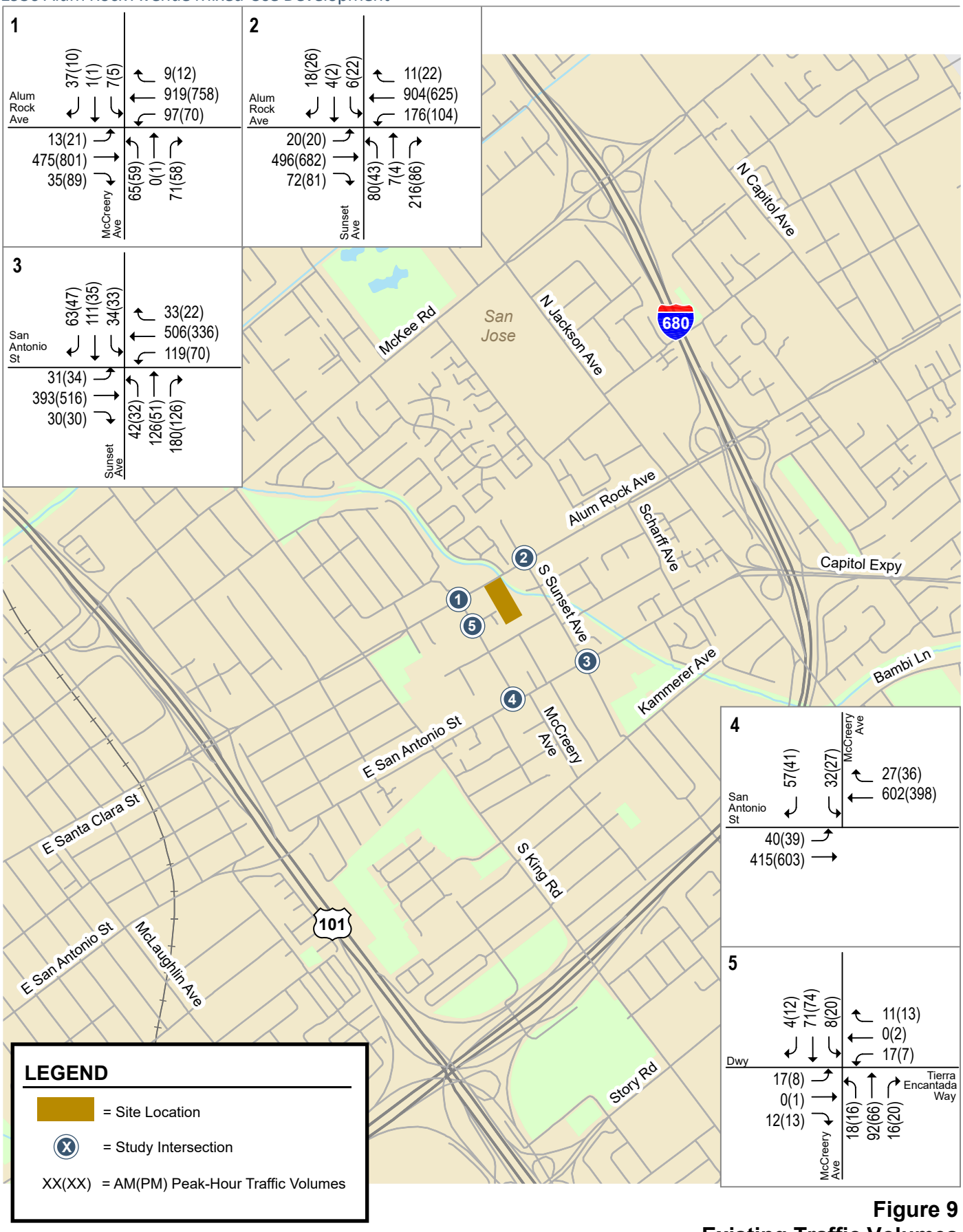


Figure 9
Existing Traffic Volumes

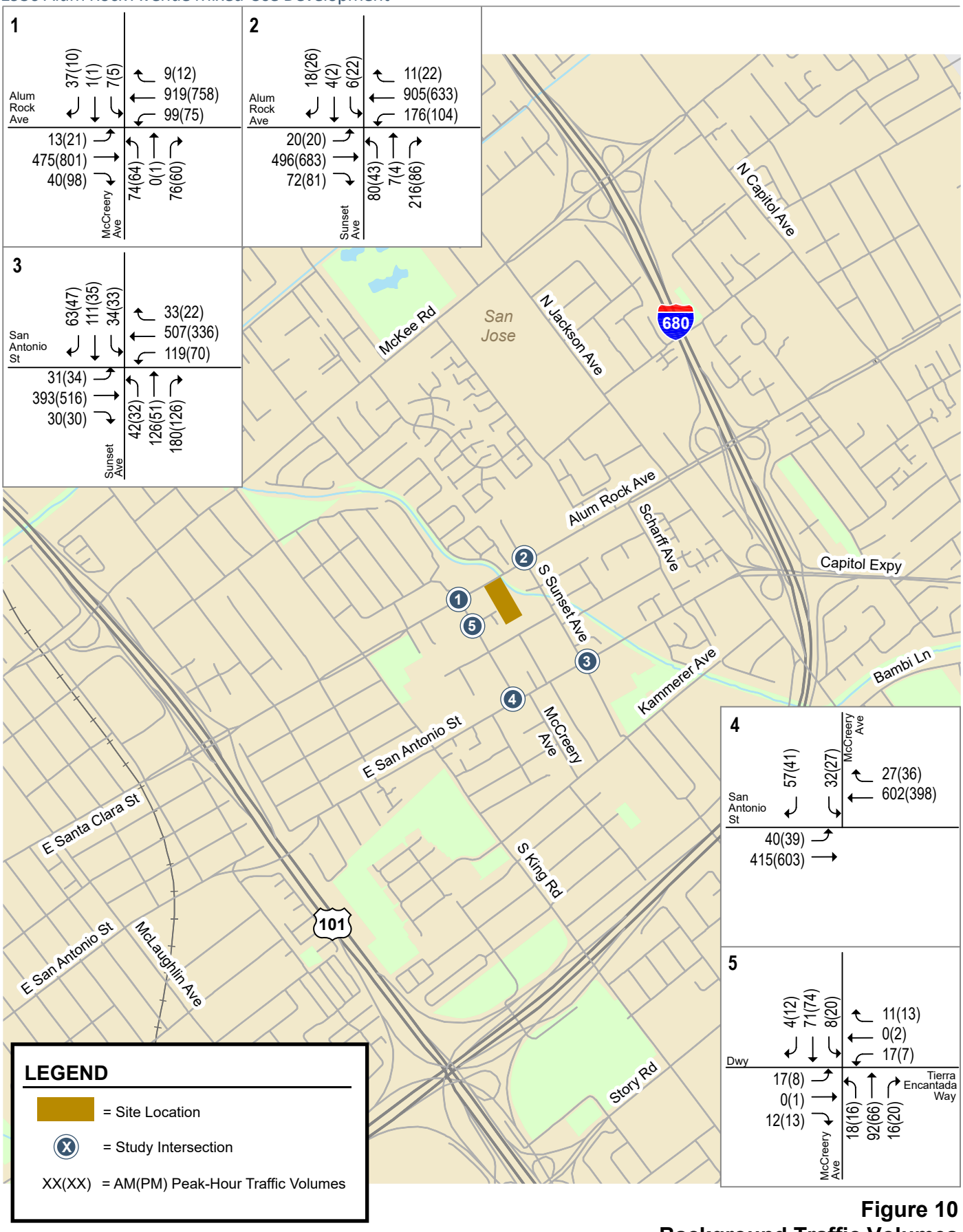


Figure 10
Background Traffic Volumes

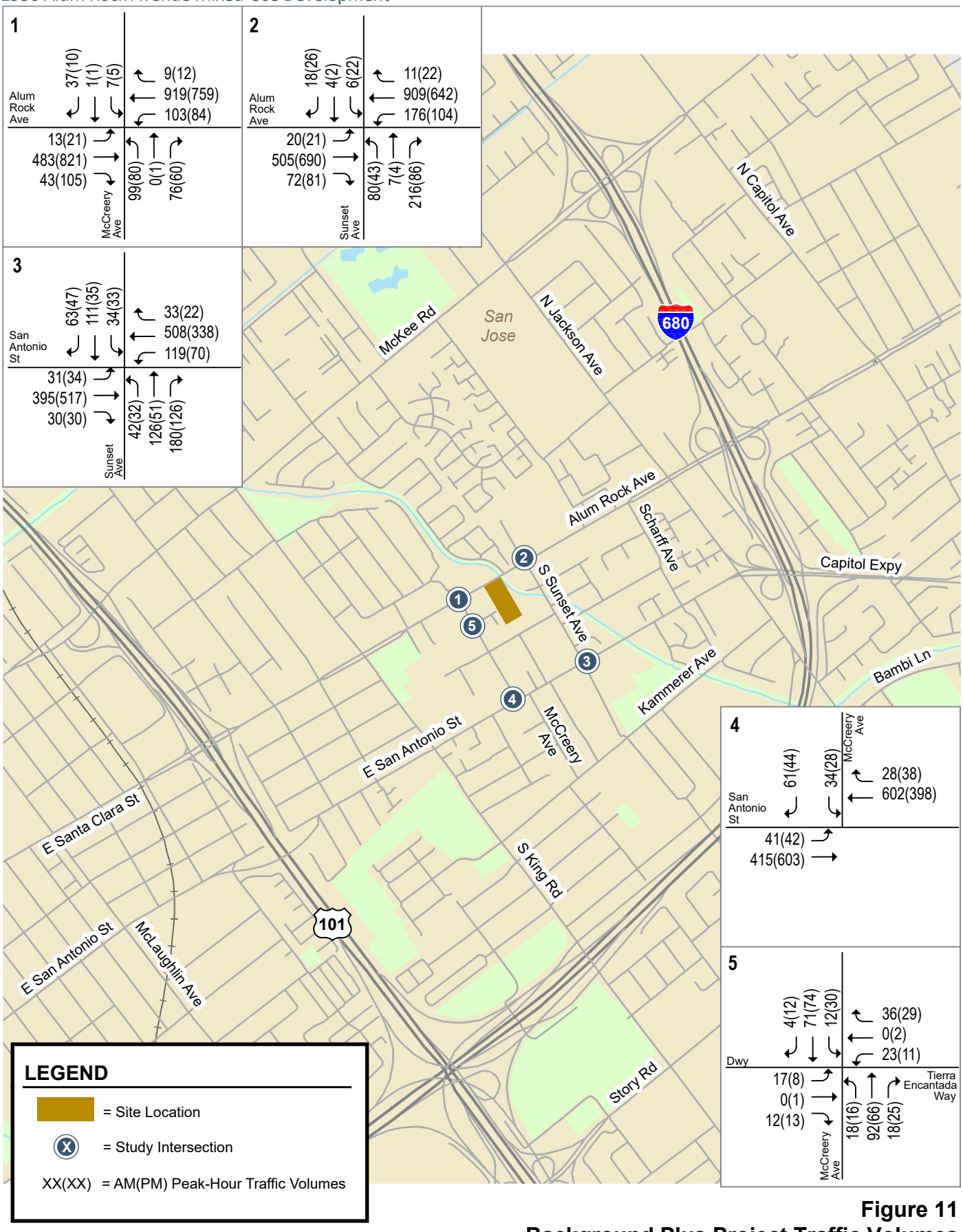


Figure 11
Background Plus Project Traffic Volumes

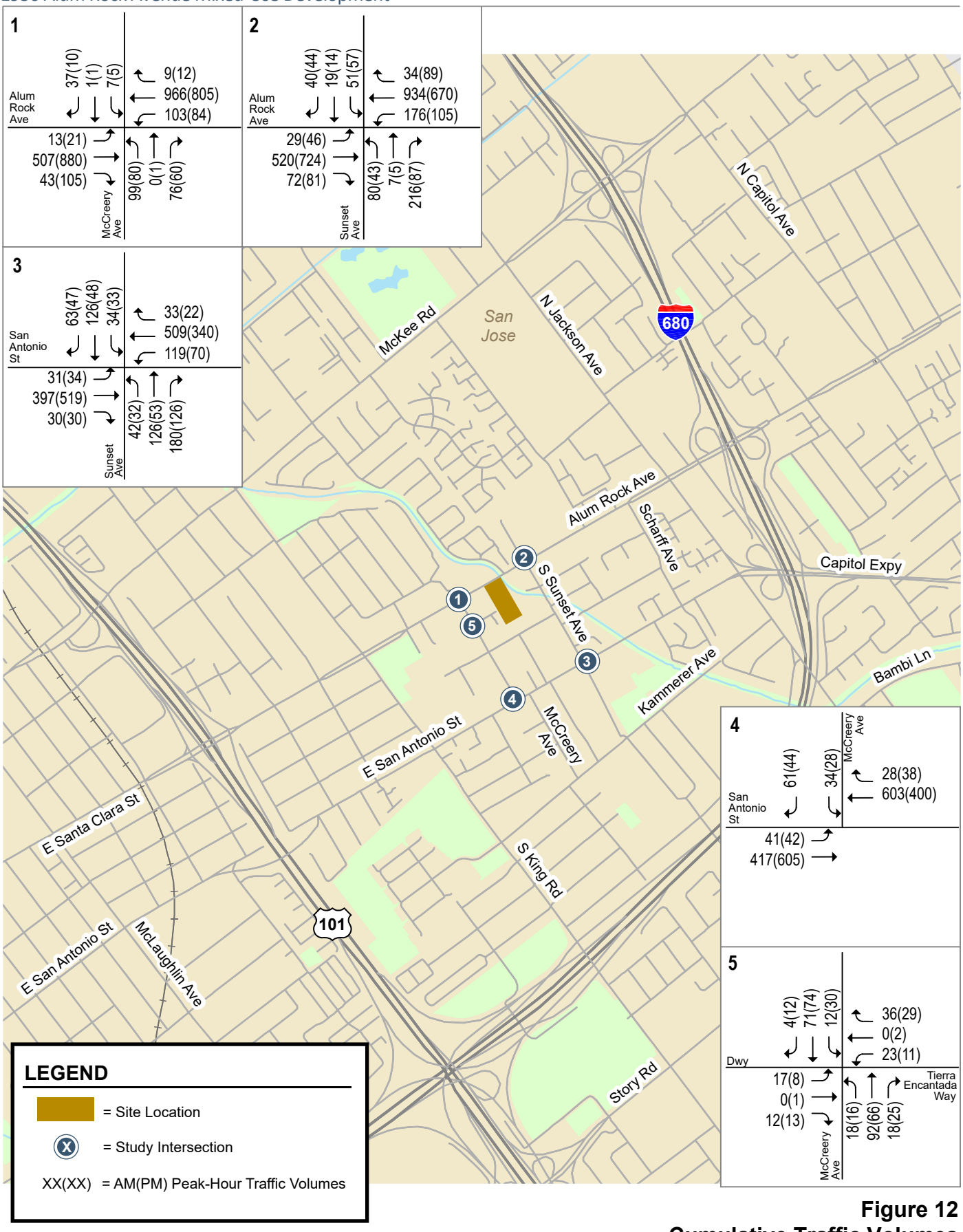


Figure 12
Cumulative Traffic Volumes

Intersection Queuing Analysis

The queuing analysis is based on vehicle queuing for left-turn movements at signalized intersections where the project would add a noteworthy number of trips (approximately 10 trips or more per lane). Based on the assignment of project-generated trips, the northbound and westbound left-turn movements (i.e., shared lane movements) at the intersection of McCreery Avenue and Alum Rock Avenue were evaluated for potential queuing issues. The results of the analysis show that adequate vehicle storage would be provided to accommodate the 95th percentile vehicle queues that would develop for these movements under all traffic scenarios (see Table 5).

Table 5
Intersection Queuing Analysis Summary

	McCreery Avenue & Alum Rock Avenue			
	NB L-T-R		WB L-T	
Analysis Scenario	AM	PM	AM	PM
Existing				
Cycle Length (sec)	124	124	124	124
Volume (vph)	136	118	556	449
95th %. Queue (veh/ln)	9	9	28	23
95th %. Queue[1] (ft/ln)	225	225	700	575
Storage (ft/ln) [2]	275	275	775	775
Adequate (Y/N)	Y	Y	Y	Y
Background				
Cycle Length (sec)	124	124	124	124
Volume (vph)	150	125	558	454
95th %. Queue (veh/ln)	10	9	28	23
95th %. Queue[1] (ft/ln)	250	225	700	575
Storage (ft/ln) [2]	275	275	775	775
Adequate (Y/N)	Y	Y	Y	Y
Background Plus Project				
Cycle Length (sec)	124	124	124	124
Volume (vph)	175	141	562	463
95th %. Queue (veh/ln)	11	9	28	23
95th %. Queue[1] (ft/ln)	275	225	700	575
Storage (ft/ln) [2]	275	275	775	775
Adequate (Y/N)	Y	Y	Y	Y
Cumulative				
Cycle Length (sec)	124	124	124	124
Volume (vph)	175	141	586	486
95th %. Queue (veh/ln)	11	9	29	24
95th %. Queue[1] (ft/ln)	275	225	725	600
Storage (ft/ln) [2]	275	275	775	775
Adequate (Y/N)	Y	Y	Y	Y

Notes:
[1] Assumes 25 feet per vehicle queued.
[2] Storage length for northbound shared left-through-right lane = distance between Alum Rock Ave and Tierra Encantada. Storage length for westbound shared left-through lane = distance between McCreery Ave and Sunset Ave.

Vehicular Access and Circulation

The site access and circulation evaluation is based on the October 16, 2020 site plan prepared by Architects Orange (see Figure 2 in Chapter 1). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, geometric design, sight distance and operations (e.g., queuing and delay). On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and City design standards.

Site Access

Site access to the project would be provided via a two-way driveway on Alum Rock Avenue (main project entrance) that would serve the residential and retail components of the project and a two-way driveway on Tierra Encantada Way (secondary project entrance) that would serve the residential component of the project only. Because the BRT transit lanes run within the center median on Alum Rock Avenue, the main driveway on Alum Rock Avenue would be limited to right turns in and out. An internal security gate near the main entry would separate the retail/guest parking area from the secure residential parking garage. A residential security gate would also be provided at the Tierra Encantada Way driveway, which would prevent retail customers and guests from entering the site from Tierra Encantada Way. Key fob entry access would be provided at the Tierra Encantada Way sliding security gate. An additional key fob operated security door would be provided for pedestrian/resident access.

According to the City of San Jose Department of Transportation (DOT) Geometric Design Guidelines, the standard width for a two-way driveway that serves a multi-family residential development is 26 feet wide, measured at the throat. According to the site plan, the project driveway on Alum Rock Avenue would be 26 feet wide, measured at the throat. The proposed project driveway on Tierra Encantada Way is shown to be 32 feet wide.

Recommendation: Reduce the Tierra Encantada Way driveway width from 32 feet to the City-standard 26 feet.

Project Driveway Operations

The total project-generated trips that are estimated to occur at the main project driveway on Alum Rock Avenue are 11 inbound trips and 9 outbound trips during the AM peak hour, and 26 inbound trips and 8 outbound trips during the PM peak hour. The total project-generated trips that are estimated to occur at the secondary project driveway on Tierra Encantada Way are 6 inbound trips and 31 outbound trips during the AM peak hour, and 15 inbound trips and 20 outbound trips during the PM peak hour. The project-generated trips at the driveways are shown previously on Figure 8. Due to the relatively low numbers of project-generated vehicle trips during the AM and PM peak hours, operational issues related to vehicle queueing and/or excessive delay are not expected to occur at the project driveways.

Sight Distance at the Alum Rock Avenue Driveway

The project driveways should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and vehicles and bicycles traveling on Alum Rock Avenue. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway and provides drivers with the ability to locate sufficient gaps in traffic and exit a driveway.

No parking zones should be established immediately adjacent to the project driveway to ensure that exiting vehicles can see pedestrians on the sidewalk, as well as vehicles traveling on Alum Rock Avenue. There are no roadway curves or landscaping features shown on the site plan that would obstruct the vision of exiting drivers. However, street parking is allowed on Alum Rock Avenue west of

the driveway and could obstruct the view of exiting drivers if there were cars parked adjacent to the driveway. Standard red curbs should be implemented adjacent to the project driveway to ensure adequate sight distance is provided.

Recommendation: Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.

The minimum acceptable sight distance is considered the Caltrans stopping sight distance. Sight distance requirements vary depending on roadway speeds. For driveways on Alum Rock Avenue, which has a posted speed limit of 30 mph, the Caltrans stopping sight distance is 250 feet (based on a design speed of 35 mph). Thus, drivers must be able to see 250 feet along Alum Rock Avenue in order to stop and avoid a collision at the driveway. If on-street parking were prohibited adjacent to the project driveway on Alum Rock Avenue, the driveway would meet the Caltrans stopping sight distance standards.

On-Site Circulation

A 26-foot wide two-way main drive aisle would provide access from Alum Rock Avenue to the retail/residential covered parking area and to the gated residential parking garage, both of which would contain 24-foot wide drive aisles and 90-degree parking stalls throughout. The City's standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided (*San Jose Municipal Code 20.90.100*). However, City staff have approved drive aisle widths of 24 feet for projects in the past, since 24-foot wide drive aisles are generally adequate for two-way circulation of vehicular traffic. The project applicant should coordinate with City staff to verify the proposed 24-foot internal drive aisle widths would be adequate to serve the project.

Recommendation: Work with City staff to confirm the 24-foot internal drive aisle widths are acceptable.

The security gate at the parking garage entrance would keep retail patrons and guests from entering the secure residential parking garage. Vehicular circulation within the parking garage would be adequate with no dead-end drive aisles. The secure residential parking garage would contain 6 tandem stalls and would be used by residents only.

Recommendation: Assign all residential tandem parking stalls to individual residential units.

A 26-foot wide two-way drive aisle would provide secure residential access from Tierra Encantada Way to a covered surface parking area, an uncovered surface parking area, and the southern parking garage entrance, all of which would contain 90-degree parking stalls. Although the 26-foot wide exterior L-shaped drive aisle dead-ends at the southeast corner of the project site, adequate turnaround space is provided.

Parking Stall Dimensions

The City of San Jose Off-Street Parking Design Standards for Uniform Car Spaces require that standard 90-degree parking stalls be a minimum of 8.5 feet wide by 17 feet long. The site plan shows the parking stalls, including the tandem stalls, would meet this requirement. The ADA accessible stalls are shown to be 9 feet wide by 18 feet long and include van accessibility.

Truck Access and Circulation

The project site plan was reviewed for truck access using truck turning-movement templates for a SU-30 truck type (single unit trucks), which represents small emergency vehicles, garbage trucks, and small to medium delivery trucks. Based on the site plan configuration, and assuming sufficient vertical clearance would be provided, adequate access would be provided for SU-30 type delivery trucks and

emergency vehicles to enter the site from the main driveway on Alum Rock Avenue, circulate through the covered retail/guest parking area, and exit back onto Alum Rock Avenue.

The site plan shows a dedicated move-in/loading space would be provided on site with access provided via Tierra Encantada Way. Adequate access would be provided for all SU-30 type trucks to enter the site from Tierra Encantada Way, immediately turn right upon entering the site, and then back into the loading space located adjacent to the trash room. A single dedicated on-site loading space for move-in/move-out and large deliveries would be adequate to serve residents of the project. A call box would be located on the outside of the security gate where an access code would be entered to open the gate for move-in/out and garbage collection activities.

Garbage Collection

The site plan shows an exterior trash enclosure would be located near the project driveway on Tierra Encantada Way. Garbage trucks require approximately 24 feet of overhead clearance to empty a bin over the truck. Since the trash bins would be stored outside the building, adequate vertical clearance would be provided for on-site garbage collection. A hammerhead configuration is proposed at the Tierra Encantada Way driveway, which would allow good access to the trash enclosure. Garbage truck operators would enter an access code to open the gate and proceed onto the site, turn left to approach the trash room head-on, collect the garbage, back straight out of the loading area, and turn left to exit the site. Since garbage collection would occur on-site, traffic operations and parking along Tierra Encantada Way would not be affected during garbage collection activities.

Emergency Vehicle Access

Emergency vehicle access (EVA) to the site would be provided via both Alum Rock Avenue and Tierra Encantada Way. The driveways and drive aisles would be adequately wide and would comply with the City's fire code. Adequate vertical clearance also would be provided on-site for emergency vehicles. The City of San Jose Fire Department requires that all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of 6 feet clearance from the property line along all sides of the buildings. According to the project site plan, the project would meet these fire access requirements.

Pedestrian, Bicycle and Transit Facilities

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals of the City's General Plan. It is the goal of the General Plan that all development projects accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and vehicle miles traveled. In addition, the adopted City Bike Master Plan establishes goals, policies and actions to make bicycling a daily part of life in San Jose. The Master Plan includes designated bike lanes along many City streets, as well as on designated bike corridors. In order to further the goals of the City, pedestrian and bicycle facilities should be encouraged with new development projects.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks along the streets and intersections in the immediate vicinity of the project site. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. Overall, the existing network of sidewalks exhibits good connectivity and would provide new residents and retail customers with safe pedestrian routes to transit services and other points of interest in the area.

The site plan indicates that the existing sidewalk along the project frontage on Alum Rock Avenue would be reconstructed to provide a 10-foot attached sidewalk with a 5-foot easement (total of 15 feet).

New sidewalks would be constructed between the project building and the sidewalk on Alum Rock Avenue. The sidewalks would provide pedestrian connections to the residential lobby, as well as to the ground level retail space and residential leasing office. The site plan also shows an open space area and sidewalk along the west side of the building that would provide a pedestrian connection between Alum Rock Avenue and Tierra Encantada Way. This walkway would provide access to the centrally located bike storage areas and residential mailboxes. Additional sidewalks would provide pedestrian connections from Tierra Encantada Way to the residential stairways, bike storage areas, and residential mailboxes.

Overall, the network of sidewalks and crosswalks exhibits good connectivity and would provide pedestrians with safe routes to transit services and other points of interest in the area.

Planned Pedestrian Improvements

The project would adhere to the following Grand Boulevard design principle to enhance pedestrian access:

- The project would provide a minimum 15-foot sidewalk width along the project frontage on Alum Rock Avenue, which is a Grand Boulevard.

Bicycle Facilities

There are no designated bike lanes or bike routes on streets in the immediate vicinity of the project site. Alum Rock Avenue is a Grand Boulevard with relatively high traffic volumes and no bicycle facilities. McCreery Avenue, Sunset Avenue, Tierra Encantada Way, and Stowe Avenue also have no bicycle facilities; however, these streets all carry low traffic volumes and are conducive to bicycle travel. Bicyclists should ride with caution on streets with no bike lanes or bike route markings.

The project would provide adequate bicycle parking. The project would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. The San Jose Bike Plan 2020 and Envision 2040 General Plan 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. The planned bicycle network improvements within the study area are described below.

Planned Bicycle Improvements

The San Jose Bike Plan 2020 indicates that additional 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 improvements, the following are relevant to the project.

- San Antonio Street, between S. 17th Street and S. King Road (Class II bike lanes)
- Sunset Avenue, between San Antonio Street and Alum Rock Avenue (Class III bike route)

Pedestrian and Bicycle Access to Schools

The following public schools are located within a one-mile walking distance from the project site:

- San Antonio Elementary School located ¼ mile southwest of the site on San Antonio Street;
- Cesar Chavez Elementary School located ½ mile southeast of the site on Kammerer Avenue;
- Lee Mathson Middle School located ½ mile southeast of the site on Kammerer Avenue; and
- Independence High School located 1 mile north of the site on Jackson Avenue

Safe pedestrian access to all four schools is provided via a continuous network of sidewalks in the surrounding area. Crosswalks with pedestrian signal heads and push buttons are provided at all the

signalized intersections, and many unsignalized intersections have crosswalks. Curb ramps are provided at all corners of the intersections, though not all meet the current ADA design standards.

Existing on-street bicycle facilities on San Antonio Street, King Road, Sunset Avenue and Jackson Street would provide bicycle access to these schools. Although Kammerer Avenue does not contain bike lanes or Sharrows, it is a low speed residential street and is conducive to bicycle travel.

The project should consider working with these nearby schools to implement a Safe Routes to Schools program, if one does not already exist, since the project would add traffic to the area and some students attending these schools may reside at the project site. Safe Routes to Schools is designed to decrease traffic and pollution and increase the health of children and the community as a whole. The program promotes walking and biking to school through education and incentives. The program also addresses the safety concerns of parents by encouraging greater enforcement of traffic laws, educating the public, and exploring ways to create safer streets. A comprehensive Safe Routes to Schools program should identify a focused area surrounding the school, provide a map with the routes that children can take to and from school, and recommend improvements to routes if necessary. It should address such pedestrian safety issues as dangerous intersections and missing or ineffective crosswalks, sidewalks, and curb ramps.

Pedestrian and Bicycle Access to Nearby Parks and Community Centers

The following parks and community centers are located within a 3/4-mile walking distance from the project site:

- Mayfair Community Center and Park located ½ mile southeast of the site on Kammerer Avenue;
- Plata Arroyo Park located ½ mile northwest of the site on King Road; and
- Overfelt Gardens and Chinese Cultural Garden located ¾ mile north of the site on McKee Road.

Safe pedestrian access to these parks is provided via a continuous network of sidewalks. Crosswalks with pedestrian signal heads and push buttons are provided at all the signalized intersections, and many unsignalized intersections have crosswalks. Curb ramps are provided at all corners of the intersections, though some may not meet current ADA design standards.

Existing on-street bicycle facilities on San Antonio Street, King Road, and Sunset Avenue would provide bicycle access to Mayfair Park and Plata Arroyo Park. Although Kammerer Avenue does not contain bicycle facilities, it is a low speed residential street and is conducive to bicycle travel. Bicycle travel to and from Overfelt Gardens and Chinese Cultural Garden would be less than ideal since on-street bicycle facilities are not provided on McKee Road.

Transit Services

Existing transit service to the study area is provided by the VTA. Eight bus routes provide service to the study area. The bus stops closest to the project site are located at the McCreery Avenue/Alum Rock Avenue intersection and are served by Route 23. Stops for Bus Rapid Transit Routes 522 and 523 are located at the King Road/Alum Rock Avenue intersection, about 1,500 feet west of the project site.

Due to the project site's proximity to transit stops, it is reasonable to assume that some residents would utilize the transit services provided. It is estimated that the small increase in transit demand generated by the proposed project could be accommodated by the current available ridership capacity of the transit service in the study area.

Planned Transit Facility Improvements

The project would be required to adhere to the following Grand Boulevard design principle to improve transit facilities:

- Minimize driveway cuts to minimize transit delay.

The project would reduce the number of driveways along the project frontage on Alum Rock Avenue from two driveways to one. Therefore, the project would adhere to this Grand Boulevard design principle.

Vision Zero San Jose

Alum Rock Avenue between US 101 and Manning Avenue is designated as a "Safety Priority Street" as part of San Jose's Vision Zero policy (*Vision Zero San Jose*, April 2015). The goal of Vision Zero San Jose is to create a community culture that prioritizes traffic safety. Vision Zero is designed to create policies that focus on roadway safety for all modes, particularly non-automobile modes. Streets with these "Safety Priority Street" designations are given priority within the City's Transportation Capital Improvement Program (CIP) to provide safer transportation systems for all users.

Alum Rock Avenue Improvements

The Santa Clara Street/Alum Rock Avenue BRT project was recently completed on Alum Rock Avenue with safety improvements, including a new median busway with pedestrian safety islands, pedestrian-oriented traffic signals at Eastgate Avenue and at Scharff Avenue, and LED streetlight conversions.

Effects on Neighborhood Streets

The location of the western project driveway on Tierra Encantada Way means that some trips (approximately 60%, or about 475 daily vehicle trips) generated by the residential component of the project would use McCreery Avenue to access the site. Because of the relatively low traffic volumes on the surrounding typical neighborhood streets, the addition of project traffic would likely result in a noticeable increase to the existing traffic volumes on Tierra Encantada Way and McCreery Avenue during the weekday AM and PM peak hours of traffic.

It is important to note that the definition of an acceptable amount of traffic on a local residential street is subjective and depends on many factors such as street width, presence of on-street parking, building setback, number of driveways, and whether the local residential street provides access to major roadways. A typical daily traffic volume for a local residential street with a speed limit of 25 mph in the City of San Jose ranges from approximately 1,000 to 3,000 vehicles per day. The existing daily traffic volume for McCreery Avenue is approximately 2,000 vehicles per day, which is typical for this type of roadway. The City of San Jose has not established thresholds or guidelines that can be applied to determine the level of increase that should be deemed a substantial increase, or the level of increase that would have a negative effect on the livability or quality of life for residents on a local residential street.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk closures, crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely. Per City standard practice, the project would be required to submit a construction management plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas, construction vehicle parking, and the planned truck routes.

Parking

The project parking requirements per the City of San Jose's Zoning Code are described below.

Vehicle Parking Requirements

Residential Vehicle Parking Requirement

The City of San Jose's off-street parking requirements as described in the City's Zoning Code (Chapter 20.90, Table 20-210) for multiple dwellings with all open parking are as follows: 1.25 parking spaces for studio and one-bedroom units, 1.7 parking spaces for two-bedroom units, and 2.0 parking spaces for three-bedroom units. Based on the City's off-street parking requirement and prior to applying any relevant parking reductions, the 194-unit project would require a total of 269 parking spaces calculated as follows:

- 140 studio/one-bedroom units x 1.25 spaces = 175 parking spaces
- 49 two-bedroom units x 1.7 spaces = 84 parking spaces
- 5 three-bedroom units x 2.0 spaces = 10 parking spaces

Residential Parking Reductions

The project site is located within 2,000 feet of an existing BRT station and the project would provide adequate bicycle parking. Thus, the project qualifies for a 20 percent reduction in the City's parking requirement (per San Jose Municipal Code). However, since the project would consist of 100% affordable units, the project is eligible for an even larger parking reduction per Assembly Bill (AB) 744. AB 744 states that for 100% affordable housing developments located within one-half mile of a major transit stop, the parking requirement cannot exceed 0.5 spaces per unit. After applying the reduced parking rate (state bonus density) to the 194 affordable residential units, 97 parking spaces would be required to serve the residential component of the project (194 units x 0.5 = 97 spaces).

Retail Vehicle Parking Requirement

The City of San Jose vehicle parking requirement for retail/commercial uses located within Urban Villages was applied to the project and is 1 space per 400 s.f. Based on this parking requirement, the project would require 8 parking spaces to serve the 3,000 s.f. of ground-floor retail space that is being proposed (3,000 s.f. / 400 = 7.5 spaces).

After applying all relevant parking reductions, the project is required to provide a total of 105 vehicle parking spaces consisting of 97 residential spaces and 8 retail spaces.

Vehicle Parking Supply

The site plan shows a total of 110 off-street vehicle parking spaces consisting of 97 residential parking spaces (47 secure garage spaces, 14 garage spaces outside the security gate, and 36 secure spaces outside the garage), 12 covered retail parking spaces, and 1 USPS designated parking space (located within the secure garage). Thus, the project would meet the City's residential off-street parking requirement and would exceed the off-street parking requirement for retail by 4 spaces.

Motorcycle and Bicycle Parking Requirements

The motorcycle and bicycle parking requirements for the residential and retail components of the project are described below.

Motorcycle Parking Requirement

The City requires one motorcycle parking space for every four residential units and one motorcycle parking space per every 20 code-required retail vehicle parking spaces (per Chapter 20.90, Tables 20-190, 20-210 and 20-250 of the City's Zoning Code). This equates to 50 motorcycle parking spaces: 49 spaces to serve the residential use and 1 space (rounded up) to serve the retail use. Applying a 20 percent reduction (Urban Village reduction) equates to a motorcycle parking requirement of 40 spaces.

Bicycle Parking Requirement

The City requires one bicycle parking space for every four residential units and one bicycle parking space for every 3,000 s.f. of retail space (per Chapter 20.90, Tables 20-190 and 20-210 of the City's Zoning Code). Note also that a minimum of three bicycle parking spaces shall be provided for retail uses. Thus, the project is required to provide a total of 52 bicycle parking spaces: 49 bicycle spaces to serve the residential use and 3 bicycle spaces to serve the retail use.

Motorcycle and Bicycle Parking Supply

According to the site plan, the project is proposing to provide 24 motorcycle parking spaces.

Recommendation: The project applicant should coordinate with the City of San Jose Planning Department to verify whether 24 motorcycle parking spaces would be adequate to serve the project.

The project is proposing to provide 194 bicycle parking spaces for residents and 4 bicycle parking spaces for retail customers, which would exceed the City's bicycle parking requirements.

5. Conclusions

This report presents the results of the local transportation analysis (LTA) conducted for the proposed affordable residential mixed-use development located at 1936 Alum Rock Avenue in San Jose, California. The project would redevelop the vacant 1.49-acre site with a 6-story building consisting of 194 affordable residential units (5 residential levels) over 1 level of parking and 3,000 square feet (s.f.) of ground level retail space. Access to the parking garage would be provided via Alum Rock Avenue and Tierra Encantada Way. A small amount of surface parking would also be provided at the south end of the site. Access to the surface parking spaces and emergency vehicle access would be provided via Tierra Encantada Way.

The project site is located within the Alum Rock Avenue Urban Village per the Envision San Jose 2040 General Plan. Urban Villages (planned growth areas) are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the General Plan's environmental goals. The project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards are designated as major transportation corridors that tie land uses within major transportation facilities. As a Grand Boulevard, the Santa Clara Street/Alum Rock Avenue Bus Rapid Transit (BRT) system operates along the corridor with BRT buses running in the median lanes on Alum Rock Avenue between 34th Street and Alexander Avenue.

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the mixed-use project (restricted affordable residential and local-serving retail) is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues that may arise due to the project. The LTA includes an evaluation of weekday AM and PM peak hour traffic conditions for three signalized intersections and two unsignalized intersections in the immediate vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects on transit, bicycle, and pedestrian facilities.

Local Transportation Analysis

Project Trip Generation

Vehicle trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The project trip generation was reduced based on site location factors, applicable internal and external trip reductions, and project-specific factors in accordance with standard San Jose procedures. After applying the ITE trip rates and applicable trip reductions, the proposed project is estimated to generate 864 new daily vehicle trips, with 57 new trips (17 inbound and 40 outbound) occurring during the AM peak hour and 69 new trips (41 inbound and 28 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

The results of the analysis show that the signalized study intersections would operate at an acceptable level of service (LOS D) during both the AM and PM peak hours of traffic under all traffic scenarios.

Other Transportation Items

The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the area. The proposed site plan shows adequate site access and on-site circulation, and no significant operational issues are expected to occur as a result of the project. Below are recommendations resulting from the site plan review.

Recommendations

- Reduce the Tierra Encantada Way driveway width from 32 feet to the City-standard 26 feet.
- Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.
- Work with City staff to confirm the 24-foot internal drive aisle widths are acceptable.
- Assign all residential tandem parking stalls to individual residential units.
- Coordinate with City staff to verify whether 24 motorcycle parking spaces would be adequate to serve the project.

Villa Del Sol Residential Mixed-Use Development LTA

Technical Appendices

Appendix A

Traffic Volumes

Intersection Number: 1
Traffix Node Number: 3958
Intersection Name: McCreery Avenue & Alum Rock Avenue
Peak Hour: **AM** Date of Analysis: 08/12/20
Count Date: 10/18/11
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **8.75**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2011)	34	1	6	8	845	89	65	0	60	32	437	12	1589
1% Annual Growth (SJ Count Adjustment)	*3*	*0*	*1*	*1*	*74*	*8*	*6*	*0*	*5*	*3*	*38*	*1*	139
Existing Conditions (July 2020)	37	1	7	9	919	97	71	0	65	35	475	13	1728
Approved Project Trips													
San Jose ATI	0	0	0	0	0	2	5	0	9	5	0	0	21
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	2	5	0	9	5	0	0	21
Background Conditions	37	1	7	9	919	99	76	0	74	40	475	13	1749
Bkgrd check	37	1	7	9	919	99	76	0	74	40	475	13	
Project Trips													
Residential Project Trips	0	0	0	0	0	3	0	0	25	3	7	0	38
Retail Project Trips	0	0	0	0	0	1	0	0	0	0	1	0	2
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	4	0	0	25	3	8	0	40
Background + Project Conditions	37	1	7	9	919	103	76	0	99	43	483	13	1789
Bkgrd+Proj check	37	1	7	9	919	103	76	0	99	43	483	13	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	45	0	0	0	0	0	19	0	64
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	2	0	0	0	0	0	5	0	7
Total Pending Project Trips	0	0	0	0	47	0	0	0	0	0	24	0	71
Background + Pending + Project Conditions	37	1	7	9	966	103	76	0	99	43	507	13	1860
Mini Cumulative Check	37	1	7	9	966	103	76	0	99	43	507	13	

Intersection Number: 2
Traffix Node Number: 3257
Intersection Name: Sunset Avenue & Alum Rock Avenue
Peak Hour: **AM** Date of Analysis: 08/12/20
Count Date: 10/02/14
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **5.75**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2014)	17	4	6	10	855	166	204	7	76	68	469	19	1901
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*0*	*1*	*49*	*10*	*12*	*0*	*4*	*4*	*27*	*1*	109
Existing Conditions (July 2020)	18	4	6	11	904	176	216	7	80	72	496	20	2010
Approved Project Trips													
San Jose ATI	0	0	0	0	1	0	0	0	0	0	0	0	1
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	1	0	0	0	0	0	0	0	1
Background Conditions	18	4	6	11	905	176	216	7	80	72	496	20	2011
Bkgrd check	18	4	6	11	905	176	216	7	80	72	496	20	
Project Trips													
Residential Project Trips	0	0	0	0	3	0	0	0	0	0	8	0	11
Retail Project Trips	0	0	0	0	1	0	0	0	0	0	1	0	2
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	4	0	0	0	0	0	9	0	13
Background + Project Conditions	18	4	6	11	909	176	216	7	80	72	505	20	2024
Bkgrd+Proj check	18	4	6	11	909	176	216	7	80	72	505	20	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	22	15	45	23	23	0	0	0	0	0	10	9	147
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	2	0	0	0	0	0	5	0	7
Total Pending Project Trips	22	15	45	23	25	0	0	0	0	0	15	9	154
Background + Pending + Project Conditions	40	19	51	34	934	176	216	7	80	72	520	29	2178
Mini Cumulative Check	40	19	51	34	934	176	216	7	80	72	520	29	

Intersection Number: 3
Traffix Node Number: 3761
Intersection Name: Sunset Avenue & San Antonio Street
Peak Hour: **AM** Date of Analysis: 08/12/20
Count Date: 05/09/19
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **1.17**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (May 2019)	62	110	34	33	500	118	178	125	42	30	388	31	1651
1% Annual Growth (SJ Count Adjustment)	*1*	*1*	*0*	*0*	*6*	*1*	*2*	*1*	*0*	*0*	*5*	*0*	19
Existing Conditions (July 2020)	63	111	34	33	506	119	180	126	42	30	393	31	1670
Approved Project Trips													
San Jose ATI	0	0	0	0	1	0	0	0	0	0	0	0	1
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	1	0	0	0	0	0	0	0	1
Background Conditions	63	111	34	33	507	119	180	126	42	30	393	31	1671
Bkgrd check	63	111	34	33	507	119	180	126	42	30	393	31	
Project Trips													
Residential Project Trips	0	0	0	0	1	0	0	0	0	0	2	0	3
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	1	0	0	0	0	0	2	0	3
Background + Project Conditions	63	111	34	33	508	119	180	126	42	30	395	31	1674
Bkgrd+Proj check	63	111	34	33	508	119	180	126	42	30	395	31	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	15	0	0	0	0	0	0	0	0	0	0	15
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	1	0	0	0	0	0	2	0	3
Total Pending Project Trips	0	15	0	0	1	0	0	0	0	0	2	0	18
Background + Pending + Project Conditions	63	126	34	33	509	119	180	126	42	30	397	31	1692
Mini Cumulative Check	63	126	34	33	509	119	180	126	42	30	397	31	

Intersection Number: 4
Traffix Node Number: 14
Intersection Name: McCreery Avenue & San Antonio Street (unsig)
Peak Hour: **AM** Date of Analysis: 08/12/20
Count Date: 11/15/17
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **2.67**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Nov 2017)	56	0	31	26	586	0	0	0	0	0	404	39	1142
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*1*	*1*	*16*	*0*	*0*	*0*	*0*	*0*	*11*	*1*	30
Existing Conditions (July 2020)	57	0	32	27	602	0	0	0	0	0	415	40	1172
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	57	0	32	27	602	0	0	0	0	0	415	40	1172
Bkgrd check	57	0	32	27	602	0	0	0	0	0	415	40	
Project Trips													
Residential Project Trips	4	0	2	1	0	0	0	0	0	0	0	1	8
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	0	2	1	0	0	0	0	0	0	0	1	8
Background + Project Conditions	61	0	34	28	602	0	0	0	0	0	415	41	1180
Bkgrd+Proj check	61	0	34	28	602	0	0	0	0	0	415	41	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	1	0	0	0	0	0	2	0	3
Total Pending Project Trips	0	0	0	0	1	0	0	0	0	0	2	0	3
Background + Pending + Project Conditions	61	0	34	28	603	0	0	0	0	0	417	41	1183
Mini Cumulative Check	61	0	34	28	603	0	0	0	0	0	417	41	

Intersection Number: 5
Traffix Node Number: 15
Intersection Name: McCreery Avenue & Tierra Encantada (unsig)
Peak Hour: **AM** Date of Analysis: 08/12/20
Count Date: 11/15/17
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **2.67**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2011)	4	69	8	11	0	17	16	90	18	12	0	17	262
1% Annual Growth (SJ Count Adjustment)	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	7
Existing Conditions (July 2020)	4	71	8	11	0	17	16	92	18	12	0	17	269
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	4	71	8	11	0	17	16	92	18	12	0	17	269
Bkgrd check	4	71	8	11	0	17	16	92	18	12	0	17	
Project Trips													
Residential Project Trips	0	0	4	25	0	6	2	0	0	0	0	0	37
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	4	25	0	6	2	0	0	0	0	0	37
Background + Project Conditions	4	71	12	36	0	23	18	92	18	12	0	17	306
Bkgrd+Proj check	4	71	12	36	0	23	18	92	18	12	0	17	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pending Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background + Pending + Project Conditions	4	71	12	36	0	23	18	92	18	12	0	17	306
Mini Cumulative Check	4	71	12	36	0	23	18	92	18	12	0	17	

Intersection Number: 1
Traffix Node Number: 3958
Intersection Name: McCreery Avenue & Alum Rock Avenue
Peak Hour: **PM** Date of Analysis: 08/12/20
Count Date: 10/18/11
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **8.75**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2011)	9	1	5	11	697	64	53	1	54	82	737	19	1733
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*0*	*1*	*61*	*6*	*5*	*0*	*5*	*7*	*64*	*2*	152
Existing Conditions (July 2020)	10	1	5	12	758	70	58	1	59	89	801	21	1885
Approved Project Trips													
San Jose ATI	0	0	0	0	0	5	2	0	5	9	0	0	21
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	5	2	0	5	9	0	0	21
Background Conditions	10	1	5	12	758	75	60	1	64	98	801	21	1906
Bkgrd check	10	1	5	12	758	75	60	1	64	98	801	21	
Project Trips													
Residential Project Trips	0	0	0	0	0	8	0	0	16	7	19	0	50
Retail Project Trips	0	0	0	0	1	1	0	0	0	0	1	0	3
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	1	9	0	0	16	7	20	0	53
Background + Project Conditions	10	1	5	12	759	84	60	1	80	105	821	21	1959
Bkgrd+Proj check	10	1	5	12	759	84	60	1	80	105	821	21	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	40	0	0	0	0	0	54	0	94
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	6	0	0	0	0	0	5	0	11
Total Pending Project Trips	0	0	0	0	46	0	0	0	0	0	59	0	105
Background + Pending + Project Conditions	10	1	5	12	805	84	60	1	80	105	880	21	2064
Mini Cumulative Check	10	1	5	12	805	84	60	1	80	105	880	21	

Intersection Number: 2
Traffix Node Number: 3257
Intersection Name: Sunset Avenue & Alum Rock Avenue
Peak Hour: **PM** Date of Analysis: 08/12/20
Count Date: 10/02/14
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **5.75**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2014)	25	2	21	21	591	98	81	4	41	77	645	19	1625
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*1*	*1*	*34*	*6*	*5*	*0*	*2*	*4*	*37*	*1*	93
Existing Conditions (July 2020)	26	2	22	22	625	104	86	4	43	81	682	20	1718
Approved Project Trips													
San Jose ATI	0	0	0	0	8	0	0	0	0	0	1	0	9
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	8	0	0	0	0	0	1	0	9
Background Conditions	26	2	22	22	633	104	86	4	43	81	683	20	1727
Bkgrd check	26	2	22	22	633	104	86	4	43	81	683	20	
Project Trips													
Residential Project Trips	0	0	0	0	8	0	0	0	0	0	5	0	13
Retail Project Trips	0	0	0	0	1	0	0	0	0	0	2	1	4
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	9	0	0	0	0	0	7	1	17
Background + Project Conditions	26	2	22	22	642	104	86	4	43	81	690	21	1744
Bkgrd+Proj check	26	2	22	22	642	104	86	4	43	81	690	21	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	18	12	35	67	22	1	1	1	0	0	29	25	211
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	6	0	0	0	0	0	5	0	11
Total Pending Project Trips	18	12	35	67	28	1	1	1	0	0	34	25	222
Background + Pending + Project Conditions	44	14	57	89	670	105	87	5	43	81	724	46	1966
Mini Cumulative Check	44	14	57	89	670	105	87	5	43	81	724	46	

Intersection Number: 3
Traffix Node Number: 3761
Intersection Name: Sunset Avenue & San Antonio Street
Peak Hour: **PM** Date of Analysis: 08/12/20
Count Date: 05/09/19
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **1.17**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (May 2019)	46	35	33	22	332	69	125	50	32	30	510	34	1318
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*0*	*0*	*4*	*1*	*1*	*1*	*0*	*0*	*6*	*0*	15
Existing Conditions (July 2020)	47	35	33	22	336	70	126	51	32	30	516	34	1333
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	47	35	33	22	336	70	126	51	32	30	516	34	1333
Bkgrd check	47	35	33	22	336	70	126	51	32	30	516	34	
Project Trips													
Residential Project Trips	0	0	0	0	2	0	0	0	0	0	1	0	3
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	2	0	0	0	0	0	1	0	3
Background + Project Conditions	47	35	33	22	338	70	126	51	32	30	517	34	1336
Bkgrd+Proj check	47	35	33	22	338	70	126	51	32	30	517	34	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	13	0	0	0	0	0	2	0	0	0	0	15
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	2	0	0	0	0	0	2	0	4
Total Pending Project Trips	0	13	0	0	2	0	0	2	0	0	2	0	19
Background + Pending + Project Conditions	47	48	33	22	340	70	126	53	32	30	519	34	1355
Mini Cumulative Check	47	48	33	22	340	70	126	53	32	30	519	34	

Intersection Number: 4
Traffix Node Number: 14
Intersection Name: McCreery Avenue & San Antonio Street (unsig)
Peak Hour: **PM** Date of Analysis: 08/12/20
Count Date: 11/15/17
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **2.67**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2011)	40	0	26	35	388	0	0	0	0	0	587	38	1114
1% Annual Growth (SJ Count Adjustment)	*1*	*0*	*1*	*1*	*10*	*0*	*0*	*0*	*0*	*0*	*16*	*1*	30
Existing Conditions (July 2020)	41	0	27	36	398	0	0	0	0	0	603	39	1144
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	41	0	27	36	398	0	0	0	0	0	603	39	1144
Bkgrd check	41	0	27	36	398	0	0	0	0	0	603	39	
Project Trips													
Residential Project Trips	3	0	1	2	0	0	0	0	0	0	0	3	9
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	3	0	1	2	0	0	0	0	0	0	0	3	9
Background + Project Conditions	44	0	28	38	398	0	0	0	0	0	603	42	1153
Bkgrd+Proj check	44	0	28	38	398	0	0	0	0	0	603	42	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	2	0	0	0	0	0	2	0	4
Total Pending Project Trips	0	0	0	0	2	0	0	0	0	0	2	0	4
Background + Pending + Project Conditions	44	0	28	38	400	0	0	0	0	0	605	42	1157
Mini Cumulative Check	44	0	28	38	400	0	0	0	0	0	605	42	

Intersection Number: 5
Traffix Node Number: 15
Intersection Name: McCreery Avenue & Tierra Encantada (unsig)
Peak Hour: **PM** Date of Analysis: 08/12/20
Count Date: 11/15/17
Scenario: 194 Affordable Apartments + 3 KSF Retail

SJ Growth Factor (% Per Year): **0.01**
Number of Years: **2.67**

	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Count (Oct 2011)	12	72	19	13	2	7	19	64	16	13	1	8	246
1% Annual Growth (SJ Count Adjustment)	*0*	*2*	*1*	*0*	*0*	*0*	*1*	*2*	*0*	*0*	*0*	*0*	7
Existing Conditions (July 2020)	12	74	20	13	2	7	20	66	16	13	1	8	253
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	12	74	20	13	2	7	20	66	16	13	1	8	253
Bkgrd check	12	74	20	13	2	7	20	66	16	13	1	8	
Project Trips													
Residential Project Trips	0	0	10	16	0	4	5	0	0	0	0	0	35
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	10	16	0	4	5	0	0	0	0	0	35
Background + Project Conditions	12	74	30	29	2	11	25	66	16	13	1	8	288
Bkgrd+Proj check	12	74	30	29	2	11	25	66	16	13	1	8	
Pending Projects													
Sunset Alum Rock Mixed-Use (CP20-001)	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Portugal Mixed-Use (PD18-016)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Pending Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background + Pending + Project Conditions	12	74	30	29	2	11	25	66	16	13	1	8	288
Mini Cumulative Check	12	74	30	29	2	11	25	66	16	13	1	8	

Appendix B

Approved Trips Inventory

AM PROJECT TRIPS

04/28/2020

Intersection of : Alum Rock Av & Sunset Av & S Sunset Av

Traffix Node Number : 3257

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	1	0
TOTAL:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	1	0
SOUTH	0	0	0
WEST	0	0	0

PM PROJECT TRIPS

04/28/2020

Intersection of : Alum Rock Av & Sunset Av & S Sunset Av

Traffix Node Number : 3257

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	1	0	0	8	0
TOTAL:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	8	0
SOUTH	0	0	0
WEST	0	1	0

AM PROJECT TRIPS

04/28/2020

Intersection of : E San Antonio St & S Sunset Av

Traffix Node Number : 3761

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	1	0
TOTAL:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	1	0
SOUTH	0	0	0
WEST	0	0	0

PM PROJECT TRIPS

04/28/2020

Intersection of : E San Antonio St & S Sunset Av

Traffix Node Number : 3761

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	0	0
SOUTH	0	0	0
WEST	0	0	0

AM PROJECT TRIPS

04/28/2020

Intersection of : Alum Rock Av & McCreery Av / Silcreek Dr

Traffix Node Number : 3958

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	9	0	5	0	0	0	0	0	5	2	0	0
TOTAL:	**9**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	2	0	0
SOUTH	9	0	5
WEST	0	0	5

PM PROJECT TRIPS

04/28/2020

Intersection of : Alum Rock Av & McCreery Av / Silcreek Dr

Traffix Node Number : 3958

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	5	0	2	0	0	0	0	0	9	5	0	0
TOTAL:	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**9**	**5**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	5	0	0
SOUTH	5	0	2
WEST	0	0	9

Appendix C

VMT Evaluation Tool Summary Report

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: Villa Del Sol Mixed-Use Residentl
Tool Version: 2/29/2019
Location: 1936 Alum Rock Avenue, San Jose, CA
Date: 12/11/2020
Parcel: 48119003 Parcel Type: Urban Low Transit

Proposed Parking Spaces Vehicles: 110 Bicycles: 198

LAND USE:

Residential:

Single Family	0 DU
Multi Family	194 DU
Subtotal	194 DU

Office: 0 KSF

Retail: 3 KSF

Industrial: 0 KSF

Percent of All Residential Units

Extremely Low Income (≤ 30% MFI)	0 % Affordable
Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Low Income (> 50% MFI, ≤ 80% MFI)	100 % Affordable

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density

Existing Density (DU/Residential Acres in half-mile buffer)	9
With Project Density (DU/Residential Acres in half-mile buffer)	10

Increase Development Diversity

Existing Activity Mix Index	0.31
With Project Activity Mix Index	0.30

Integrate Affordable and Below Market Rate

Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	100 %

Increase Employment Density

Existing Density (Jobs/Commercial Acres in half-mile buffer)	24
With Project Density (Jobs/Commercial Acres in half-mile buffer)	24

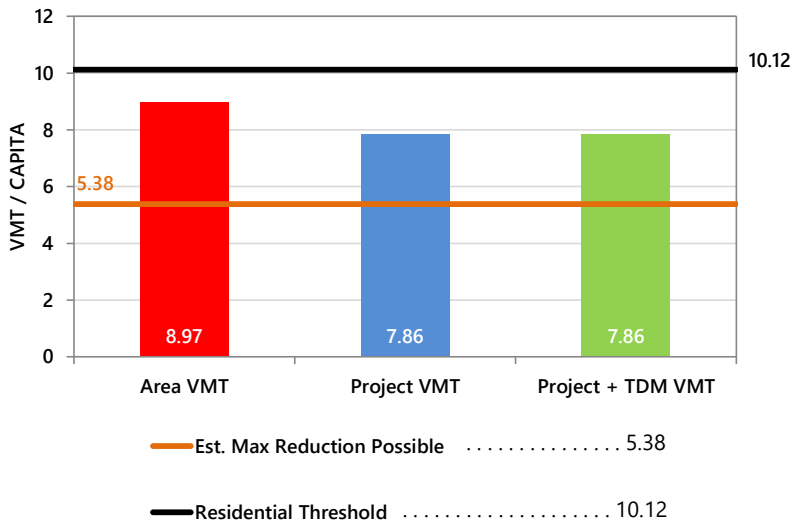
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

RESIDENTIAL ONLY

The tool estimates that the project would generate per capita VMT below the City's threshold.



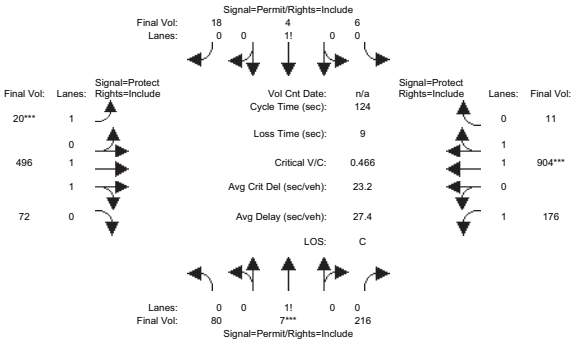
Appendix D

Intersection Level of Service Calculations

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3257: ALUM ROCK/SUNSET



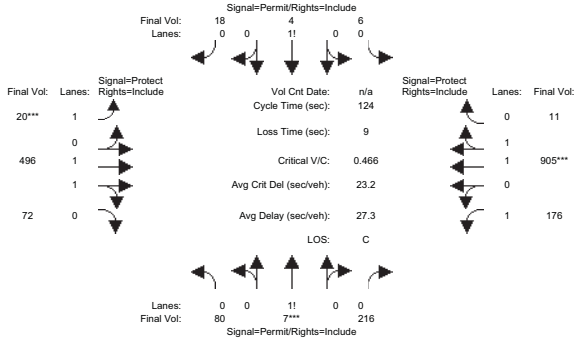
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	80	7	216	6	4	18	20	496	72	176	904	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	7	216	6	4	18	20	496	72	176	904	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	7	216	6	4	18	20	496	72	176	904	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	7	216	6	4	18	20	496	72	176	904	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	7	216	6	4	18	20	496	72	176	904	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	7	216	6	4	18	20	496	72	176	904	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.26	0.02	0.72	0.21	0.14	0.65	1.00	1.74	0.26	1.00	1.98	0.02
Final Sat.:	462	40	1248	375	250	1125	1750	3231	469	1750	3655	44
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.02	0.02	0.02	0.01	0.15	0.15	0.10	0.25	0.25
Crit Moves:		****					****				****	
Green Time:	44.5	44.5	44.5	44.5	44.5	44.5	7.0	42.6	42.6	27.9	63.5	63.5
Volume/Cap:	0.48	0.48	0.48	0.04	0.04	0.04	0.20	0.45	0.45	0.45	0.48	0.48
Delay/Veh:	31.4	31.4	31.4	25.9	25.9	25.9	56.9	31.8	31.8	42.2	19.8	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.4	31.4	31.4	25.9	25.9	25.9	56.9	31.8	31.8	42.2	19.8	19.8
LOS by Move:	C	C	C	C	C	C	E	C	C	D	B	B
DesignQueue:	15	15	15	1	1	1	1	14	14	10	17	17

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3257: ALUM ROCK/SUNSET



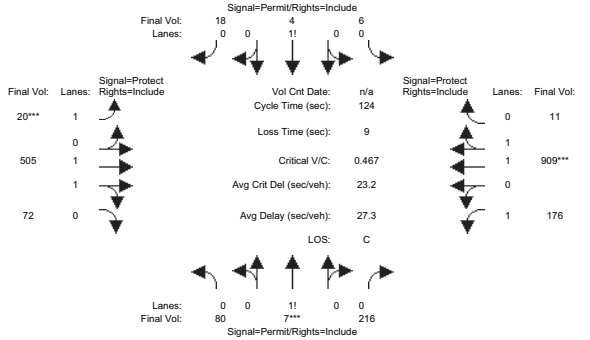
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	80	7	216	6	4	18	20	496	72	176	904	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	7	216	6	4	18	20	496	72	176	904	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	1	0
Initial Fut:	80	7	216	6	4	18	20	496	72	176	905	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	7	216	6	4	18	20	496	72	176	905	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	7	216	6	4	18	20	496	72	176	905	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	7	216	6	4	18	20	496	72	176	905	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.26	0.02	0.72	0.21	0.14	0.65	1.00	1.74	0.26	1.00	1.98	0.02
Final Sat.:	462	40	1248	375	250	1125	1750	3231	469	1750	3656	44
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.02	0.02	0.02	0.01	0.15	0.15	0.10	0.25	0.25
Crit Moves:		****					****				****	
Green Time:	44.4	44.4	44.4	44.4	44.4	44.4	7.0	42.6	42.6	27.9	63.6	63.6
Volume/Cap:	0.48	0.48	0.48	0.04	0.04	0.04	0.20	0.45	0.45	0.45	0.48	0.48
Delay/Veh:	31.5	31.5	31.5	26.0	26.0	26.0	56.9	31.8	31.8	42.2	19.8	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	31.5	31.5	26.0	26.0	26.0	56.9	31.8	31.8	42.2	19.8	19.8
LOS by Move:	C	C	C	C	C	C	E	C	C	D	B	B
DesignQueue:	15	15	15	1	1	1	1	14	14	10	17	17

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3257: ALUM ROCK/SUNSET



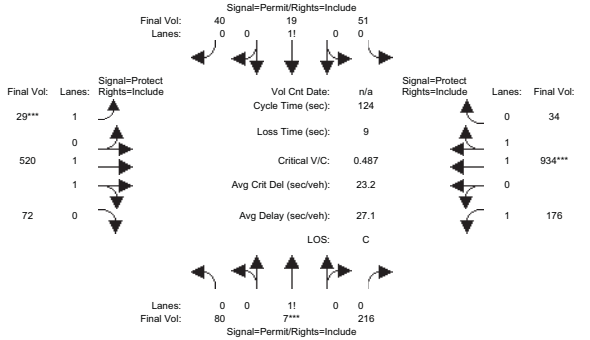
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	80	7	216	6	4	18	20	496	72	176	904	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	7	216	6	4	18	20	496	72	176	904	11
Added Vol:	0	0	0	0	0	0	0	9	0	0	4	0
ATI:	0	0	0	0	0	0	0	0	0	0	1	0
Initial Fut:	80	7	216	6	4	18	20	505	72	176	909	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	7	216	6	4	18	20	505	72	176	909	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	7	216	6	4	18	20	505	72	176	909	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	7	216	6	4	18	20	505	72	176	909	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.26	0.02	0.72	0.21	0.14	0.65	1.00	1.74	0.26	1.00	1.98	0.02
Final Sat.:	462	40	1248	375	250	1125	1750	3238	462	1750	3656	44
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.02	0.02	0.02	0.01	0.16	0.16	0.10	0.25	0.25
Crit Moves:		****					****				****	
Green Time:	44.3	44.3	44.3	44.3	44.3	44.3	7.0	43.0	43.0	27.7	63.7	63.7
Volume/Cap:	0.48	0.48	0.48	0.04	0.04	0.04	0.20	0.45	0.45	0.45	0.48	0.48
Delay/Veh:	31.5	31.5	31.5	26.0	26.0	26.0	56.9	31.6	31.6	42.4	19.7	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	31.5	31.5	26.0	26.0	26.0	56.9	31.6	31.6	42.4	19.7	19.7
LOS by Move:	C	C	C	C	C	C	E	C	C	D	B	B
DesignQueue:	15	15	15	1	1	1	1	14	14	11	17	17

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #3257: ALUM ROCK/SUNSET



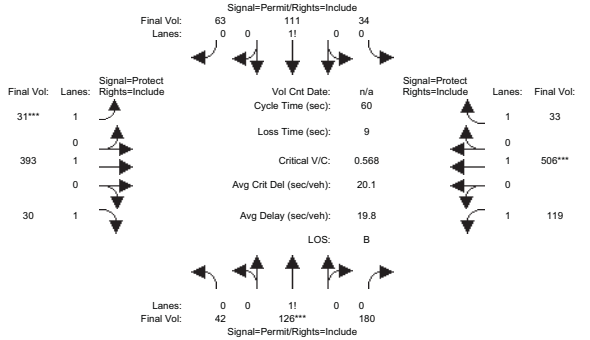
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	7	216	51	19	40	29	520	72	176	934	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	7	216	51	19	40	29	520	72	176	934	34
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	7	216	51	19	40	29	520	72	176	934	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	7	216	51	19	40	29	520	72	176	934	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	7	216	51	19	40	29	520	72	176	934	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	7	216	51	19	40	29	520	72	176	934	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.26	0.02	0.72	0.47	0.17	0.36	1.00	1.75	0.25	1.00	1.93	0.07
Final Sat.:	462	40	1248	811	302	636	1750	3250	450	1750	3570	130
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.06	0.06	0.06	0.02	0.16	0.16	0.10	0.26	0.26
Crit Moves:		****					****				****	
Green Time:	43.0	43.0	43.0	43.0	43.0	43.0	7.0	44.2	44.2	27.8	65.0	65.0
Volume/Cap:	0.50	0.50	0.50	0.18	0.18	0.18	0.29	0.45	0.45	0.45	0.50	0.50
Delay/Veh:	32.6	32.6	32.6	28.4	28.4	28.4	57.8	30.8	30.8	42.3	19.2	19.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.6	32.6	32.6	28.4	28.4	28.4	57.8	30.8	30.8	42.3	19.2	19.2
LOS by Move:	C	C	C	C	C	C	E	C	C	D	B	B
DesignQueue:	16	16	16	5	5	5	2	14	14	10	18	18

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3761: SAN ANTONIO/SUNSET



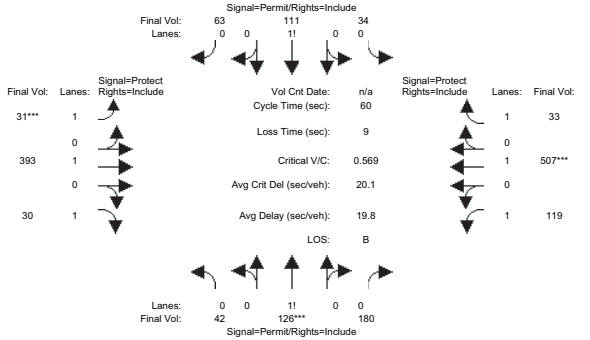
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	42	126	180	34	111	63	31	393	30	119	506	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	126	180	34	111	63	31	393	30	119	506	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	126	180	34	111	63	31	393	30	119	506	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	126	180	34	111	63	31	393	30	119	506	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	126	180	34	111	63	31	393	30	119	506	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	126	180	34	111	63	31	393	30	119	506	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.12	0.36	0.52	0.16	0.54	0.30	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	211	634	905	286	934	530	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.12	0.12	0.12	0.02	0.21	0.02	0.07	0.27	0.02
Crit Moves:		****					****				****	
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	7.0	20.6	20.6	11.6	25.2	25.2
Volume/Cap:	0.63	0.63	0.63	0.38	0.38	0.38	0.15	0.60	0.05	0.35	0.63	0.04
Delay/Veh:	23.2	23.2	23.2	18.0	18.0	18.0	25.4	20.4	13.3	23.8	17.6	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.2	23.2	23.2	18.0	18.0	18.0	25.4	20.4	13.3	23.8	17.6	10.4
LOS by Move:	C	C	C	B	B	B	C	C	B	C	B	B
DesignQueue:	9	9	9	5	5	5	1	9	1	4	11	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3761: SAN ANTONIO/SUNSET



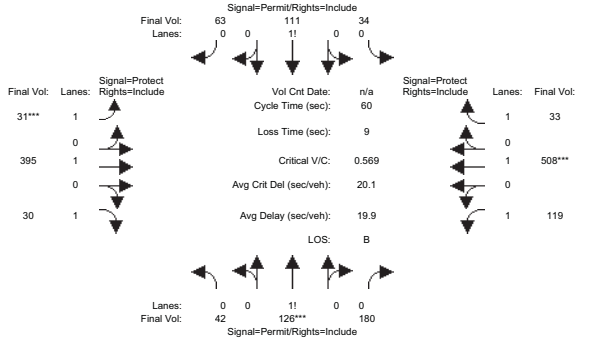
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	42	126	180	34	111	63	31	393	30	119	506	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	126	180	34	111	63	31	393	30	119	506	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	1	0
Initial Fut:	42	126	180	34	111	63	31	393	30	119	507	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	126	180	34	111	63	31	393	30	119	507	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	126	180	34	111	63	31	393	30	119	507	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	126	180	34	111	63	31	393	30	119	507	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.12	0.36	0.52	0.16	0.54	0.30	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	211	634	905	286	934	530	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.12	0.12	0.12	0.02	0.21	0.02	0.07	0.27	0.02
Crit Moves:		****					****				****	
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	7.0	20.6	20.6	11.6	25.2	25.2
Volume/Cap:	0.64	0.64	0.64	0.38	0.38	0.38	0.15	0.60	0.05	0.35	0.64	0.04
Delay/Veh:	23.2	23.2	23.2	18.1	18.1	18.1	25.4	20.4	13.3	23.8	17.6	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.2	23.2	23.2	18.1	18.1	18.1	25.4	20.4	13.3	23.8	17.6	10.4
LOS by Move:	C	C	C	B	B	B	C	C	B	C	B	B
DesignQueue:	9	9	9	5	5	5	1	9	1	4	11	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3761: SAN ANTONIO/SUNSET



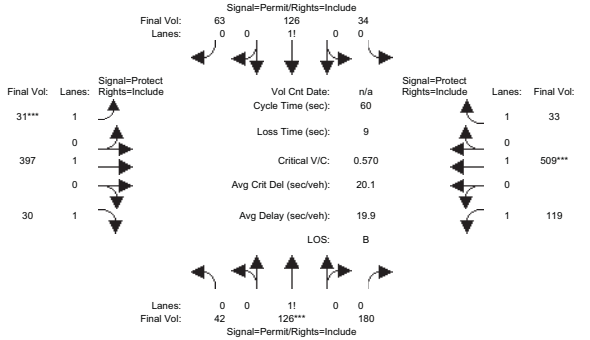
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:7:30-8:30AM												
Base Vol:	42	126	180	34	111	63	31	393	30	119	506	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	126	180	34	111	63	31	393	30	119	506	33
Added Vol:	0	0	0	0	0	0	0	2	0	0	1	0
ATI:	0	0	0	0	0	0	0	0	0	0	1	0
Initial Fut:	42	126	180	34	111	63	31	395	30	119	508	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	126	180	34	111	63	31	395	30	119	508	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	126	180	34	111	63	31	395	30	119	508	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	126	180	34	111	63	31	395	30	119	508	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.12	0.36	0.52	0.16	0.54	0.30	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	211	634	905	286	934	530	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.12	0.12	0.12	0.02	0.21	0.02	0.07	0.27	0.02
Crit Moves:		****					****				****	
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	7.0	20.6	20.6	11.6	25.2	25.2
Volume/Cap:	0.64	0.64	0.64	0.38	0.38	0.38	0.15	0.60	0.05	0.35	0.64	0.04
Delay/Veh:	23.2	23.2	23.2	18.1	18.1	18.1	25.4	20.4	13.3	23.8	17.6	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.2	23.2	23.2	18.1	18.1	18.1	25.4	20.4	13.3	23.8	17.6	10.4
LOS by Move:	C	C	C	B	B	B	C	C	B	C	B	B
DesignQueue:	9	9	9	5	5	5	1	9	1	4	11	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #3761: SAN ANTONIO/SUNSET



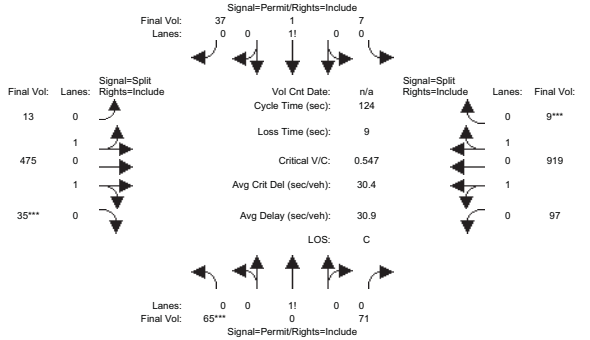
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	42	126	180	34	126	63	31	397	30	119	509	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	126	180	34	126	63	31	397	30	119	509	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	126	180	34	126	63	31	397	30	119	509	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	126	180	34	126	63	31	397	30	119	509	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	126	180	34	126	63	31	397	30	119	509	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	42	126	180	34	126	63	31	397	30	119	509	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.12	0.36	0.52	0.15	0.57	0.28	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	211	634	905	267	989	494	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.13	0.13	0.13	0.02	0.21	0.02	0.07	0.27	0.02
Crit Moves:		****					****				****	
Green Time:	18.7	18.7	18.7	18.7	18.7	18.7	7.0	20.7	20.7	11.6	25.3	25.3
Volume/Cap:	0.64	0.64	0.64	0.41	0.41	0.41	0.15	0.61	0.05	0.35	0.64	0.04
Delay/Veh:	23.3	23.3	23.3	18.5	18.5	18.5	25.4	20.4	13.3	23.9	17.6	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.3	23.3	23.3	18.5	18.5	18.5	25.4	20.4	13.3	23.9	17.6	10.4
LOS by Move:	C	C	C	B	B	B	C	C	B	C	B	B
DesignQueue:	9	9	9	6	6	6	1	9	1	4	11	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3958: ALUM ROCK/MCCREERY



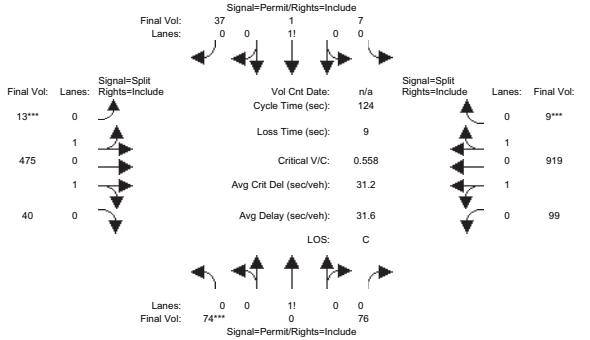
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	7:30 - 8:30 AM											
Base Vol:	65	0	71	7	1	37	13	475	35	97	919	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	0	71	7	1	37	13	475	35	97	919	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	0	71	7	1	37	13	475	35	97	919	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	0	71	7	1	37	13	475	35	97	919	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	0	71	7	1	37	13	475	35	97	919	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	0	71	7	1	37	13	475	35	97	919	9
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.48	0.00	0.52	0.16	0.02	0.82	0.05	1.82	0.13	0.19	1.79	0.02
Final Sat.:	836	0	914	272	39	1439	89	3270	241	341	3228	32
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.08	0.03	0.03	0.03	0.15	0.15	0.15	0.28	0.28	0.28
Crit Moves:	****								****			****
Green Time:	17.6	0.0	17.6	17.6	17.6	17.6	32.9	32.9	32.9	64.5	64.5	64.5
Volume/Cap:	0.55	0.00	0.55	0.18	0.18	0.18	0.55	0.55	0.55	0.55	0.55	0.55
Delay/Veh:	57.9	0.0	57.9	48.4	48.4	48.4	41.4	41.4	41.4	21.1	21.1	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.9	0.0	57.9	48.4	48.4	48.4	41.4	41.4	41.4	21.1	21.1	21.1
LOS by Move:	E	A	E	D	D	D	D	D	D	C	C	C
DesignQueue:	9	0	9	3	3	3	15	15	15	19	19	19

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3958: ALUM ROCK/MCCREERY



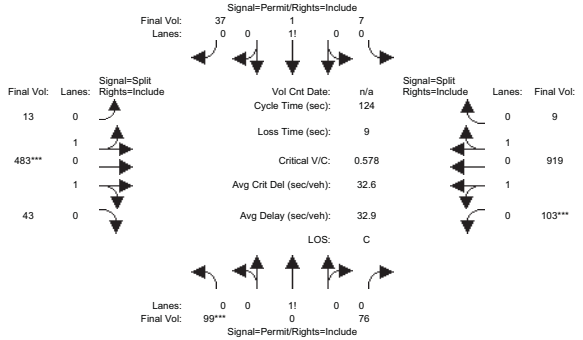
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	730-830AM											
Base Vol:	65	0	71	7	1	37	13	475	35	97	919	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	0	71	7	1	37	13	475	35	97	919	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	9	0	5	0	0	0	0	0	5	2	0	0
Initial Fut:	74	0	76	7	1	37	13	475	40	99	919	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	0	76	7	1	37	13	475	40	99	919	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	0	76	7	1	37	13	475	40	99	919	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	0	76	7	1	37	13	475	40	99	919	9
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.49	0.00	0.51	0.16	0.02	0.82	0.05	1.80	0.15	0.19	1.79	0.02
Final Sat.:	863	0	887	272	39	1439	89	3239	273	347	3221	32
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.09	0.03	0.03	0.03	0.15	0.15	0.15	0.29	0.29	0.29
Crit Moves:	****						****					****
Green Time:	19.0	0.0	19.0	19.0	19.0	19.0	32.6	32.6	32.6	63.4	63.4	63.4
Volume/Cap:	0.56	0.00	0.56	0.17	0.17	0.17	0.56	0.56	0.56	0.56	0.56	0.56
Delay/Veh:	56.7	0.0	56.7	46.9	46.9	46.9	41.9	41.9	41.9	22.0	22.0	22.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	0.0	56.7	46.9	46.9	46.9	41.9	41.9	41.9	22.0	22.0	22.0
LOS by Move:	E	A	E	D	D	D	D	D	D	C	C	C
DesignQueue:	10	0	10	3	3	3	15	15	15	20	20	20

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3958: ALUM ROCK/MCCREERY



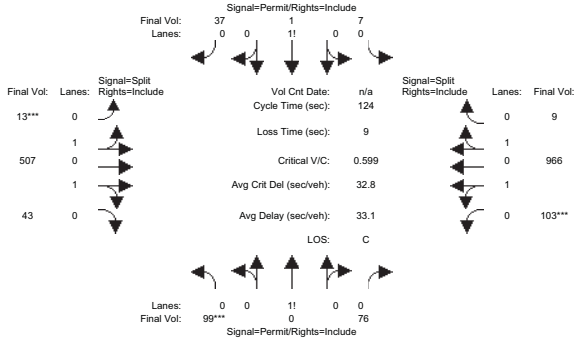
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	730-830AM											
Base Vol:	65	0	71	7	1	37	13	475	35	97	919	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	0	71	7	1	37	13	475	35	97	919	9
Added Vol:	25	0	0	0	0	0	0	8	3	4	0	0
ATI:	9	0	5	0	0	0	0	0	5	2	0	0
Initial Fut:	99	0	76	7	1	37	13	483	43	103	919	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	0	76	7	1	37	13	483	43	103	919	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	0	76	7	1	37	13	483	43	103	919	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	0	76	7	1	37	13	483	43	103	919	9
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.57	0.00	0.43	0.16	0.02	0.82	0.05	1.79	0.16	0.20	1.78	0.02
Final Sat.:	990	0	760	272	39	1439	87	3226	287	360	3209	31
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.10	0.03	0.03	0.03	0.15	0.15	0.15	0.29	0.29	0.29
Crit Moves:	****							****			****	
Green Time:	21.5	0.0	21.5	21.5	21.5	21.5	32.1	32.1	32.1	61.4	61.4	61.4
Volume/Cap:	0.58	0.00	0.58	0.15	0.15	0.15	0.58	0.58	0.58	0.58	0.58	0.58
Delay/Veh:	54.9	0.0	54.9	44.6	44.6	44.6	42.6	42.6	42.6	23.5	23.5	23.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.9	0.0	54.9	44.6	44.6	44.6	42.6	42.6	42.6	23.5	23.5	23.5
LOS by Move:	D	A	D	D	D	D	D	D	D	C	C	C
DesignQueue:	11	0	11	3	3	3	15	15	15	20	20	20

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #3958: ALUM ROCK/MCCREERY



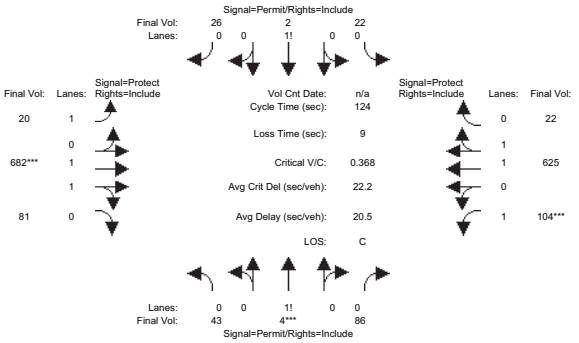
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	99	0	76	7	1	37	13	507	43	103	966	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	0	76	7	1	37	13	507	43	103	966	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	0	76	7	1	37	13	507	43	103	966	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	0	76	7	1	37	13	507	43	103	966	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	0	76	7	1	37	13	507	43	103	966	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	0	76	7	1	37	13	507	43	103	966	9
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.57	0.00	0.43	0.16	0.02	0.82	0.05	1.80	0.15	0.19	1.79	0.02
Final Sat.:	990	0	760	272	39	1439	83	3242	275	344	3226	30
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.10	0.03	0.03	0.03	0.16	0.16	0.16	0.30	0.30	0.30
Crit Moves:	****							****			****	
Green Time:	20.7	0.0	20.7	20.7	20.7	20.7	32.4	32.4	32.4	62.0	62.0	62.0
Volume/Cap:	0.60	0.00	0.60	0.15	0.15	0.15	0.60	0.60	0.60	0.60	0.60	0.60
Delay/Veh:	56.6	0.0	56.6	45.3	45.3	45.3	43.0	43.0	43.0	23.6	23.6	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.6	0.0	56.6	45.3	45.3	45.3	43.0	43.0	43.0	23.6	23.6	23.6
LOS by Move:	E	A	E	D	D	D	D	D	D	C	C	C
DesignQueue:	11	0	11	3	3	3	16	16	16	21	21	21

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3257: ALUM ROCK/SUNSET



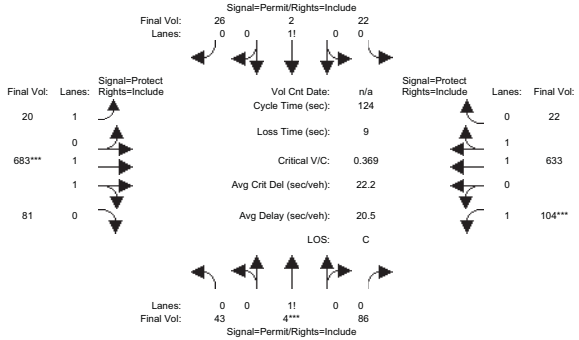
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:4:45-5:45PM												
Base Vol:	43	4	86	22	2	26	20	682	81	104	625	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	4	86	22	2	26	20	682	81	104	625	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	4	86	22	2	26	20	682	81	104	625	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	4	86	22	2	26	20	682	81	104	625	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	4	86	22	2	26	20	682	81	104	625	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	4	86	22	2	26	20	682	81	104	625	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.32	0.03	0.65	0.44	0.04	0.52	1.00	1.78	0.22	1.00	1.93	0.07
Final Sat.:	566	53	1132	770	70	910	1750	3307	393	1750	3574	126
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.03	0.03	0.03	0.01	0.21	0.21	0.06	0.17	0.17
Crit Moves:		****						****			****	
Green Time:	25.6	25.6	25.6	25.6	25.6	25.6	21.8	69.4	69.4	20.0	67.6	67.6
Volume/Cap:	0.37	0.37	0.37	0.14	0.14	0.14	0.06	0.37	0.37	0.37	0.32	0.32
Delay/Veh:	42.9	42.9	42.9	40.4	40.4	40.4	42.7	15.2	15.2	47.2	15.6	15.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.9	42.9	42.9	40.4	40.4	40.4	42.7	15.2	15.2	47.2	15.6	15.6
LOS by Move:	D	D	D	D	D	D	D	B	B	D	B	B
DesignQueue:	8	8	8	3	3	3	1	13	13	7	11	11

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3257: ALUM ROCK/SUNSET



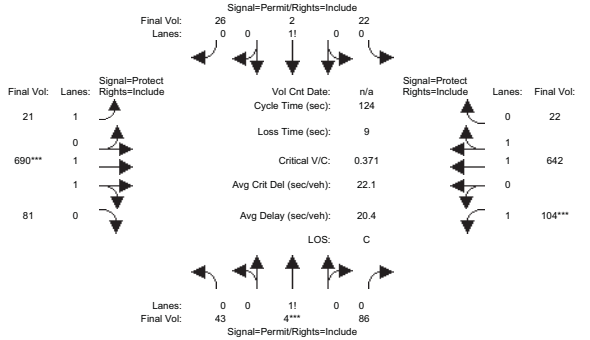
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:5:00-6:00PM												
Base Vol:	43	4	86	22	2	26	20	682	81	104	625	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	4	86	22	2	26	20	682	81	104	625	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	1	0	0	8	0
Initial Fut:	43	4	86	22	2	26	20	683	81	104	633	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	4	86	22	2	26	20	683	81	104	633	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	4	86	22	2	26	20	683	81	104	633	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	4	86	22	2	26	20	683	81	104	633	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.32	0.03	0.65	0.44	0.04	0.52	1.00	1.78	0.22	1.00	1.93	0.07
Final Sat.:	566	53	1132	770	70	910	1750	3307	392	1750	3576	124
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.03	0.03	0.03	0.01	0.21	0.21	0.06	0.18	0.18
Crit Moves:		****						****			****	
Green Time:	25.6	25.6	25.6	25.6	25.6	25.6	21.6	69.5	69.5	20.0	67.8	67.8
Volume/Cap:	0.37	0.37	0.37	0.14	0.14	0.14	0.07	0.37	0.37	0.37	0.32	0.32
Delay/Veh:	42.9	42.9	42.9	40.4	40.4	40.4	42.8	15.2	15.2	47.2	15.6	15.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.9	42.9	42.9	40.4	40.4	40.4	42.8	15.2	15.2	47.2	15.6	15.6
LOS by Move:	D	D	D	D	D	D	D	B	B	D	B	B
DesignQueue:	8	8	8	3	3	3	1	13	13	7	11	11

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3257: ALUM ROCK/SUNSET



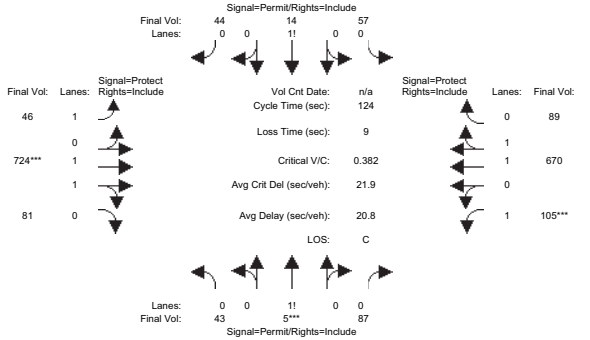
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:5:00-6:00PM												
Base Vol:	43	4	86	22	2	26	20	682	81	104	625	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	4	86	22	2	26	20	682	81	104	625	22
Added Vol:	0	0	0	0	0	0	1	7	0	0	9	0
ATI:	0	0	0	0	0	0	0	1	0	0	8	0
Initial Fut:	43	4	86	22	2	26	21	690	81	104	642	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	4	86	22	2	26	21	690	81	104	642	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	4	86	22	2	26	21	690	81	104	642	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	4	86	22	2	26	21	690	81	104	642	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.97	0.95
Lanes:	0.32	0.03	0.65	0.44	0.04	0.52	1.00	1.78	0.22	1.00	1.93	0.07
Final Sat.:	566	53	1132	770	70	910	1750	3311	389	1750	3577	123
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.03	0.03	0.03	0.01	0.21	0.21	0.06	0.18	0.18
Crit Moves:		****						****			****	
Green Time:	25.4	25.4	25.4	25.4	25.4	25.4	21.4	69.7	69.7	19.9	68.1	68.1
Volume/Cap:	0.37	0.37	0.37	0.14	0.14	0.14	0.07	0.37	0.37	0.37	0.33	0.33
Delay/Veh:	43.1	43.1	43.1	40.5	40.5	40.5	43.0	15.1	15.1	47.3	15.4	15.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	43.1	43.1	40.5	40.5	40.5	43.0	15.1	15.1	47.3	15.4	15.4
LOS by Move:	D	D	D	D	D	D	D	B	B	D	B	B
DesignQueue:	8	8	8	3	3	3	1	13	13	7	11	11

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #3257: ALUM ROCK/SUNSET



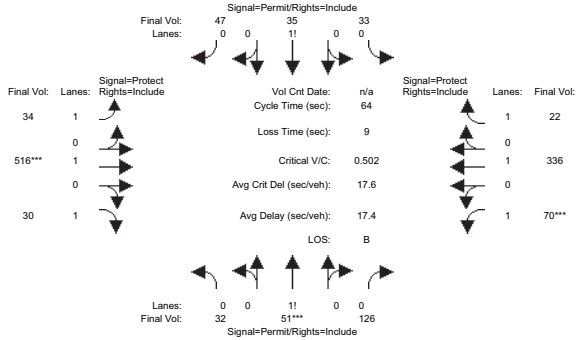
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	43	5	87	57	14	44	46	724	81	105	670	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	5	87	57	14	44	46	724	81	105	670	89
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	5	87	57	14	44	46	724	81	105	670	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	5	87	57	14	44	46	724	81	105	670	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	5	87	57	14	44	46	724	81	105	670	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	5	87	57	14	44	46	724	81	105	670	89
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	0.32	0.04	0.64	0.50	0.12	0.38	1.00	1.79	0.21	1.00	1.76	0.24
Final Sat.:	557	65	1128	867	213	670	1750	3327	372	1750	3266	434
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.07	0.07	0.07	0.03	0.22	0.22	0.06	0.21	0.21
Crit Moves:		****						****			****	
Green Time:	25.0	25.0	25.0	25.0	25.0	25.0	19.4	70.5	70.5	19.5	70.6	70.6
Volume/Cap:	0.38	0.38	0.38	0.33	0.33	0.33	0.17	0.38	0.38	0.38	0.36	0.36
Delay/Veh:	43.5	43.5	43.5	42.8	42.8	42.8	45.6	14.8	14.8	47.8	14.6	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	43.5	43.5	42.8	42.8	42.8	45.6	14.8	14.8	47.8	14.6	14.6
LOS by Move:	D	D	D	D	D	D	D	B	B	D	B	B
DesignQueue:	8	8	8	7	7	7	3	13	13	7	12	12

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3761: SAN ANTONIO/SUNSET



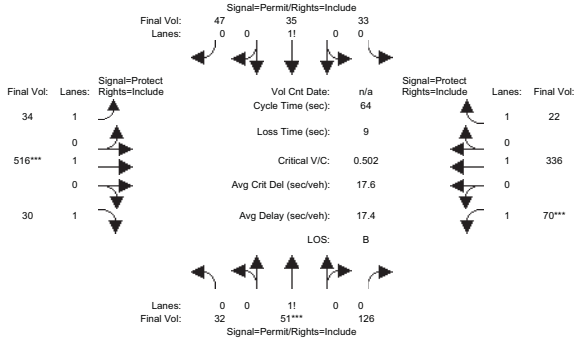
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:5:00-6:00PM												
Base Vol:	32	51	126	33	35	47	34	516	30	70	336	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	51	126	33	35	47	34	516	30	70	336	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	51	126	33	35	47	34	516	30	70	336	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	51	126	33	35	47	34	516	30	70	336	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	51	126	33	35	47	34	516	30	70	336	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	51	126	33	35	47	34	516	30	70	336	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.15	0.24	0.61	0.29	0.30	0.41	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	268	427	1055	502	533	715	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.07	0.07	0.07	0.02	0.27	0.02	0.04	0.18	0.01
Crit Moves:		****						****			****	
Green Time:	14.7	14.7	14.7	14.7	14.7	14.7	15.4	33.3	33.3	7.0	24.9	24.9
Volume/Cap:	0.52	0.52	0.52	0.29	0.29	0.29	0.08	0.52	0.03	0.37	0.45	0.03
Delay/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.2
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
DesignQueue:	6	6	6	3	3	3	1	9	1	2	8	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3761: SAN ANTONIO/SUNSET



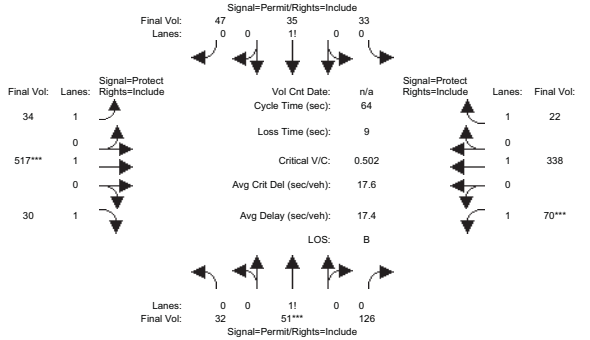
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:5:00-6:00PM												
Base Vol:	32	51	126	33	35	47	34	516	30	70	336	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	51	126	33	35	47	34	516	30	70	336	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	51	126	33	35	47	34	516	30	70	336	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	51	126	33	35	47	34	516	30	70	336	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	51	126	33	35	47	34	516	30	70	336	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	51	126	33	35	47	34	516	30	70	336	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.15	0.24	0.61	0.29	0.30	0.41	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	268	427	1055	502	533	715	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.07	0.07	0.07	0.02	0.27	0.02	0.04	0.18	0.01
Crit Moves:		****						****			****	
Green Time:	14.7	14.7	14.7	14.7	14.7	14.7	15.4	33.3	33.3	7.0	24.9	24.9
Volume/Cap:	0.52	0.52	0.52	0.29	0.29	0.29	0.08	0.52	0.03	0.37	0.45	0.03
Delay/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.2
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
DesignQueue:	6	6	6	3	3	3	1	9	1	2	8	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3761: SAN ANTONIO/SUNSET



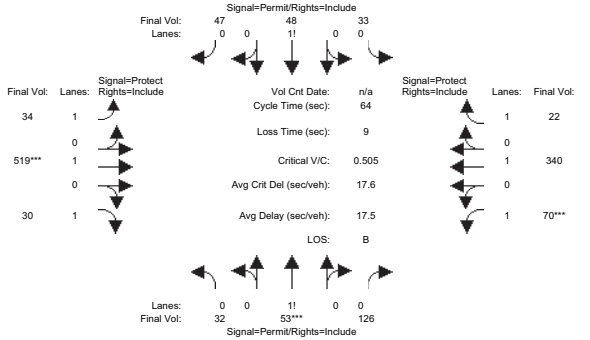
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:5:00-6:00PM												
Base Vol:	32	51	126	33	35	47	34	516	30	70	336	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	51	126	33	35	47	34	516	30	70	336	22
Added Vol:	0	0	0	0	0	0	0	1	0	0	2	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	51	126	33	35	47	34	517	30	70	338	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	51	126	33	35	47	34	517	30	70	338	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	51	126	33	35	47	34	517	30	70	338	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	51	126	33	35	47	34	517	30	70	338	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.15	0.24	0.61	0.29	0.30	0.41	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	268	427	1055	502	533	715	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.07	0.07	0.07	0.02	0.27	0.02	0.04	0.18	0.01
Crit Moves:		****						****			****	
Green Time:	14.6	14.6	14.6	14.6	14.6	14.6	15.4	33.4	33.4	7.0	25.0	25.0
Volume/Cap:	0.52	0.52	0.52	0.29	0.29	0.29	0.08	0.52	0.03	0.37	0.46	0.03
Delay/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	26.4	26.4	22.2	22.2	22.2	19.2	12.0	7.5	31.8	16.5	12.1
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
DesignQueue:	6	6	6	3	3	3	1	9	1	2	8	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #3761: SAN ANTONIO/SUNSET



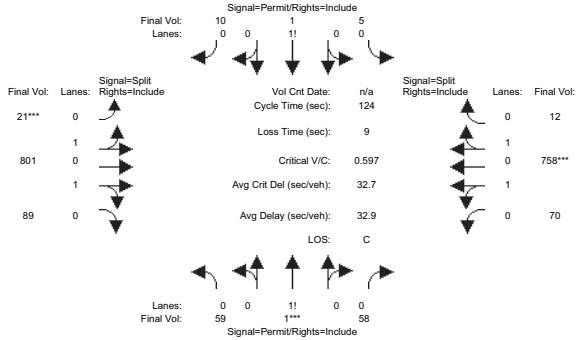
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	32	53	126	33	48	47	34	519	30	70	340	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	53	126	33	48	47	34	519	30	70	340	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	53	126	33	48	47	34	519	30	70	340	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	53	126	33	48	47	34	519	30	70	340	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	53	126	33	48	47	34	519	30	70	340	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	53	126	33	48	47	34	519	30	70	340	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.15	0.25	0.60	0.26	0.37	0.37	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	265	440	1045	451	656	643	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.07	0.07	0.07	0.02	0.27	0.02	0.04	0.18	0.01
Crit Moves:		****						****			****	
Green Time:	14.7	14.7	14.7	14.7	14.7	14.7	15.3	33.3	33.3	7.0	25.0	25.0
Volume/Cap:	0.52	0.52	0.52	0.32	0.32	0.32	0.08	0.52	0.03	0.37	0.46	0.03
Delay/Veh:	26.4	26.4	26.4	22.6	22.6	22.6	19.3	12.1	7.6	31.8	16.5	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	26.4	26.4	22.6	22.6	22.6	19.3	12.1	7.6	31.8	16.5	12.1
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
DesignQueue:	6	6	6	4	4	4	1	10	1	2	8	1

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3958: ALUM ROCK/MCCREERY



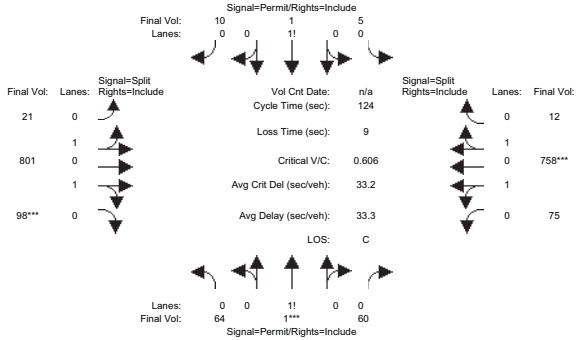
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	430-530PM											
Base Vol:	59	1	58	5	1	10	21	801	89	70	758	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	1	58	5	1	10	21	801	89	70	758	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	1	58	5	1	10	21	801	89	70	758	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	1	58	5	1	10	21	801	89	70	758	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	1	58	5	1	10	21	801	89	70	758	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	1	58	5	1	10	21	801	89	70	758	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.50	0.01	0.49	0.31	0.06	0.63	0.05	1.76	0.19	0.17	1.80	0.03
Final Sat.:	875	15	860	547	109	1094	83	3165	352	300	3249	51
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.01	0.01	0.01	0.25	0.25	0.25	0.23	0.23	0.23
Crit Moves:		****					****				****	
Green Time:	14.0	14.0	14.0	14.0	14.0	14.0	52.5	52.5	52.5	48.5	48.5	48.5
Volume/Cap:	0.60	0.60	0.60	0.08	0.08	0.08	0.60	0.60	0.60	0.60	0.60	0.60
Delay/Veh:	64.9	64.9	64.9	50.0	50.0	50.0	29.3	29.3	29.3	31.9	31.9	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.9	64.9	64.9	50.0	50.0	50.0	29.3	29.3	29.3	31.9	31.9	31.9
LOS by Move:	E	E	E	D	D	D	C	C	C	C	C	C
DesignQueue:	8	8	8	1	1	1	20	20	20	20	20	20

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3958: ALUM ROCK/MCCREERY



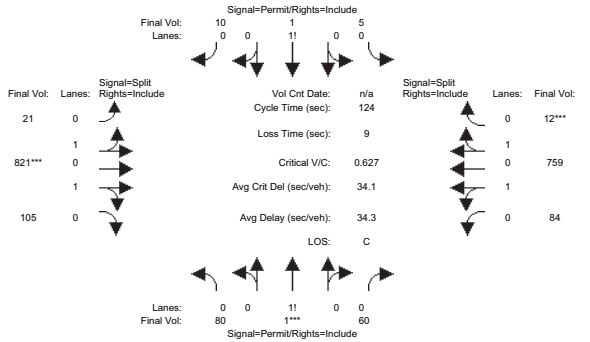
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	500-600PM											
Base Vol:	59	1	58	5	1	10	21	801	89	70	758	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	1	58	5	1	10	21	801	89	70	758	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	5	0	2	0	0	0	0	0	9	5	0	0
Initial Fut:	64	1	60	5	1	10	21	801	98	75	758	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	1	60	5	1	10	21	801	98	75	758	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1	60	5	1	10	21	801	98	75	758	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1	60	5	1	10	21	801	98	75	758	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.51	0.01	0.48	0.31	0.06	0.63	0.05	1.74	0.21	0.18	1.79	0.03
Final Sat.:	896	14	840	547	109	1094	82	3134	383	320	3229	51
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.01	0.01	0.01	0.26	0.26	0.26	0.23	0.23	0.23
Crit Moves:		****							****		****	
Green Time:	14.6	14.6	14.6	14.6	14.6	14.6	52.3	52.3	52.3	48.1	48.1	48.1
Volume/Cap:	0.61	0.61	0.61	0.08	0.08	0.08	0.61	0.61	0.61	0.61	0.61	0.61
Delay/Veh:	64.5	64.5	64.5	49.4	49.4	49.4	29.6	29.6	29.6	32.3	32.3	32.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.5	64.5	64.5	49.4	49.4	49.4	29.6	29.6	29.6	32.3	32.3	32.3
LOS by Move:	E	E	E	D	D	D	C	C	C	C	C	C
DesignQueue:	8	8	8	1	1	1	21	21	21	20	20	20

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3958: ALUM ROCK/MCCREERY



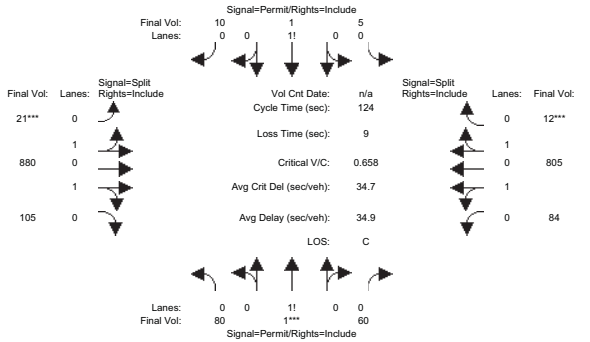
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:500-600PM												
Base Vol:	59	1	58	5	1	10	21	801	89	70	758	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	1	58	5	1	10	21	801	89	70	758	12
Added Vol:	16	0	0	0	0	0	0	20	7	9	1	0
ATI:	5	0	2	0	0	0	0	0	9	5	0	0
Initial Fut:	80	1	60	5	1	10	21	821	105	84	759	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	1	60	5	1	10	21	821	105	84	759	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1	60	5	1	10	21	821	105	84	759	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	1	60	5	1	10	21	821	105	84	759	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.57	0.01	0.42	0.31	0.06	0.63	0.04	1.74	0.22	0.20	1.77	0.03
Final Sat.:	993	12	745	547	109	1094	80	3121	399	354	3196	51
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.01	0.01	0.01	0.26	0.26	0.26	0.24	0.24	0.24
Crit Moves:		****						****				****
Green Time:	15.9	15.9	15.9	15.9	15.9	15.9	52.1	52.1	52.1	47.0	47.0	47.0
Volume/Cap:	0.63	0.63	0.63	0.07	0.07	0.07	0.63	0.63	0.63	0.63	0.63	0.63
Delay/Veh:	63.7	63.7	63.7	48.1	48.1	48.1	30.3	30.3	30.3	33.5	33.5	33.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.7	63.7	63.7	48.1	48.1	48.1	30.3	30.3	30.3	33.5	33.5	33.5
LOS by Move:	E	E	E	D	D	D	C	C	C	C	C	C
DesignQueue:	9	9	9	1	1	1	21	21	21	21	21	21

Note: Queue reported is the number of cars per lane.

Villa Del Sol Residential Mixed-Use Project
1936 Alum Rock Av, San Jose, CA
194 Residential Units + 3,000 SF of Retail

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #3958: ALUM ROCK/MCCREERY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	1	60	5	1	10	21	880	105	84	805	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	1	60	5	1	10	21	880	105	84	805	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1	60	5	1	10	21	880	105	84	805	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	1	60	5	1	10	21	880	105	84	805	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1	60	5	1	10	21	880	105	84	805	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	1	60	5	1	10	21	880	105	84	805	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.57	0.01	0.42	0.31	0.06	0.63	0.04	1.75	0.21	0.18	1.79	0.03
Final Sat.:	993	12	745	547	109	1094	75	3149	376	336	3216	48
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.01	0.01	0.01	0.28	0.28	0.28	0.25	0.25	0.25
Crit Moves:		****					****					****
Green Time:	15.2	15.2	15.2	15.2	15.2	15.2	52.7	52.7	52.7	47.2	47.2	47.2
Volume/Cap:	0.66	0.66	0.66	0.07	0.07	0.07	0.66	0.66	0.66	0.66	0.66	0.66
Delay/Veh:	66.7	66.7	66.7	48.9	48.9	48.9	30.7	30.7	30.7	34.2	34.2	34.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.7	66.7	66.7	48.9	48.9	48.9	30.7	30.7	30.7	34.2	34.2	34.2
LOS by Move:	E	E	E	D	D	D	C	C	C	C	C	C
DesignQueue:	9	9	9	1	1	1	23	23	23	22	22	22

Note: Queue reported is the number of cars per lane.

