

**Appendix J**  
**Transportation Analysis**



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## 905 N Capitol Avenue Residential Development

### Transportation Analysis

Prepared for:

**Denise Duffy & Associates, Inc.**

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### Hexagon Transportation Consultants, Inc.

Hexagon Office: 4 North Second Street, Suite 400

San Jose, CA 95113

Hexagon Job Number: 20BJ06

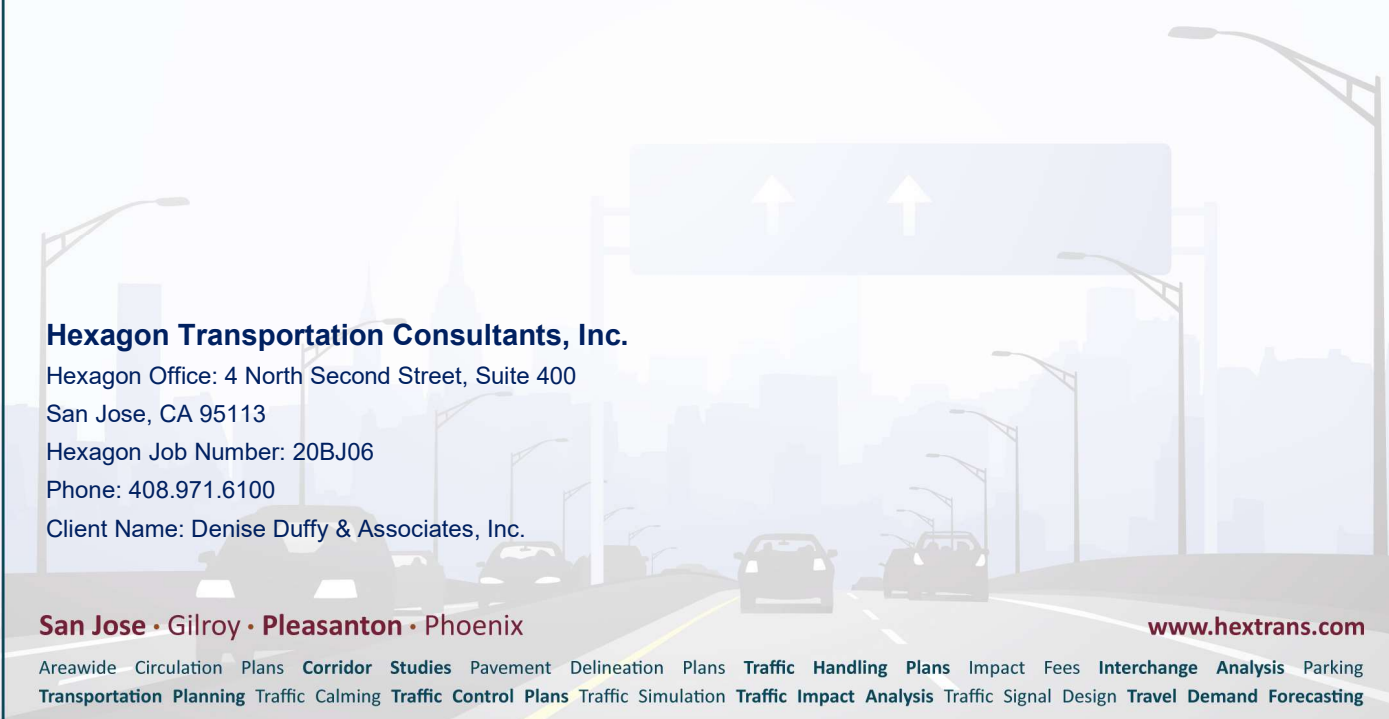
Phone: 408.971.6100

Client Name: Denise Duffy & Associates, Inc.

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## Executive Summary

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This report presents the results of the transportation analysis conducted for a proposed residential development at 905 N. Capitol Avenue in San Jose, California. The project site consists of two non-contiguous parcels that sit across Penitencia Creek Road from one another. On the larger parcel (2.12 acres), the project would construct 349 apartment units over a 369-space parking garage. The development would also include 3,000 square feet (s.f.) of ground floor office space. A single garage entrance would be provided on Penitencia Creek Road. On the smaller parcel (1.35 acres), the project would construct 32 townhomes, each with a two-car garage.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a Local Transportation Analysis (LTA). The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for three (3) signalized intersections in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit services and bicycle and pedestrian access.

The effects of the project on freeway segments were evaluated in accordance with the methodologies described in the Santa Clara Valley Transportation Authority's (VTA) *Transportation Impact Analysis Guidelines* (2014). The VTA administers the Santa Clara County Congestion Management Program (CMP).

### CEQA Transportation Analysis

The project daily VMT estimated by the City's VMT Evaluation Tool is 10.86 per capita. The project VMT, therefore, exceeds the residential threshold of 10.12 daily VMT per capita.

### Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

### Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement bike access improvements, pedestrian network improvements, and traffic



calming measures (Tier 2 multimodal infrastructure strategies), as well as provide an on-site car sharing program and a voluntary travel behavior change program (Tier 4 TDM strategies) to mitigate the significant VMT impact. These measures are listed below.

1. **Bike Access Improvements (Tier 2)**
2. **Pedestrian Network Improvements (Tier 2)**
3. **Traffic Calming Measures (Tier 2)**
4. **Car Sharing Program (Tier 4)**
5. **Voluntary Travel Behavior Change Program (Tier 4)**

### **Conclusions of VMT Impact and Mitigation**

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 10.04 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 10.12 VMT per capita).

## **Local Transportation Analysis**

### **Project Trip Generation**

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 1,758 new daily vehicle trips, with 120 new trips occurring during the AM peak hour and 146 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce 34 new inbound and 86 new outbound trips during the AM peak hour, and 88 new inbound and 58 new outbound trips during the PM peak hour.

### **Intersection Traffic Operations**

Based on the City of San Jose intersection operations analysis criteria, none of the study intersections would be adversely affected by the project.

### **Other Transportation Issues**

In general, the proposed site plan shows adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle or transit facilities in the study area. Below are recommendations resulting from the site plan review.

#### **Site Plan Recommendations**

- Provide two dedicated driveways to serve the parking garage and trash room separately with at least 4 feet separating the driveways to meet the City's design standards for driveways with an attached sidewalk (i.e., City Standard Detail R-6).
- Widen the project driveway on Kestral Way from 24 feet wide to 26 feet wide to meet the City's design standards for driveways with a detached sidewalk (i.e., City Standard Detail R-5).
- Keep the garage security gate open during the time period of the day when most inbound vehicle trips are likely to occur (generally from 3:00 PM to 7:00 PM).
- Confirm with City of San Jose Public Works staff that the proposed 24-foot-wide drive aisles within the parking garage would be adequate to serve the apartments.

- Install convex mirrors at the top and bottom of the ramp and at blind turns within the parking garage.
- Provide a garage ramp slope of no greater than 5 percent grade to meet the recommended engineering design standards for ramps containing parking.
- Provide at least 15 feet of vertical clearance at the entrance to the off-street loading space to meet the City's requirement for loading space dimensions.
- Assign all tandem parking spaces to individual two-bedroom apartment units.

## US 101/Oakland/Mabury Transportation Development Policy

Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the US 101/Oakland/Mabury TDP program. The fee for the TDP program is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of January 2021) is \$43,696 per each new PM peak hour vehicle trip that would be added to the interchange.

Based on the site location and project trip distribution patterns, it is estimated that the project would add 7 new PM peak hour vehicle trips to the US 101/Oakland Road interchange. Therefore, the project would be required to pay \$305,872 to help fund the intersection improvements discussed in the US 101/Oakland/Mabury TDP as calculated below.

**US 101/Oakland/Mabury TDP Impact Fee: \$43,696 x 7 PM peak hour trips = \$305,872**

## Transportation Demand Management Plan

After applying the allowable 20 percent parking reduction for the site's proximity to a rail station, the project would have a vehicular parking deficit of 8 percent. In order to address the parking deficit, the project plans to implement a TDM Plan. The proposed TDM Plan includes the following measures:

1. Bicycle Facilities and Resources
2. On-Site Car Share Program
3. Voluntary Travel Behavior Change Program
4. On-Site TDM Coordinator and Services
5. Preferential Parking and Charging for Electric Vehicles
6. Trip Planning Resources

# 1. Introduction

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This report presents the results of the transportation analysis conducted for a proposed residential development at 905 N. Capitol Avenue in San Jose, California (see Figure 1). The project site consists of two non-contiguous parcels that sit across Penitencia Creek Road from one another. On the larger parcel (2.12 acres), the project would construct 349 apartment units over a 369-space parking garage. The development would also include 3,000 square feet (s.f.) of ground floor office space. A single garage entrance would be provided on Penitencia Creek Road. On the smaller parcel (1.35 acres), the project would construct 32 townhomes, each with a two-car garage. The project site plan is shown on Figure 2.

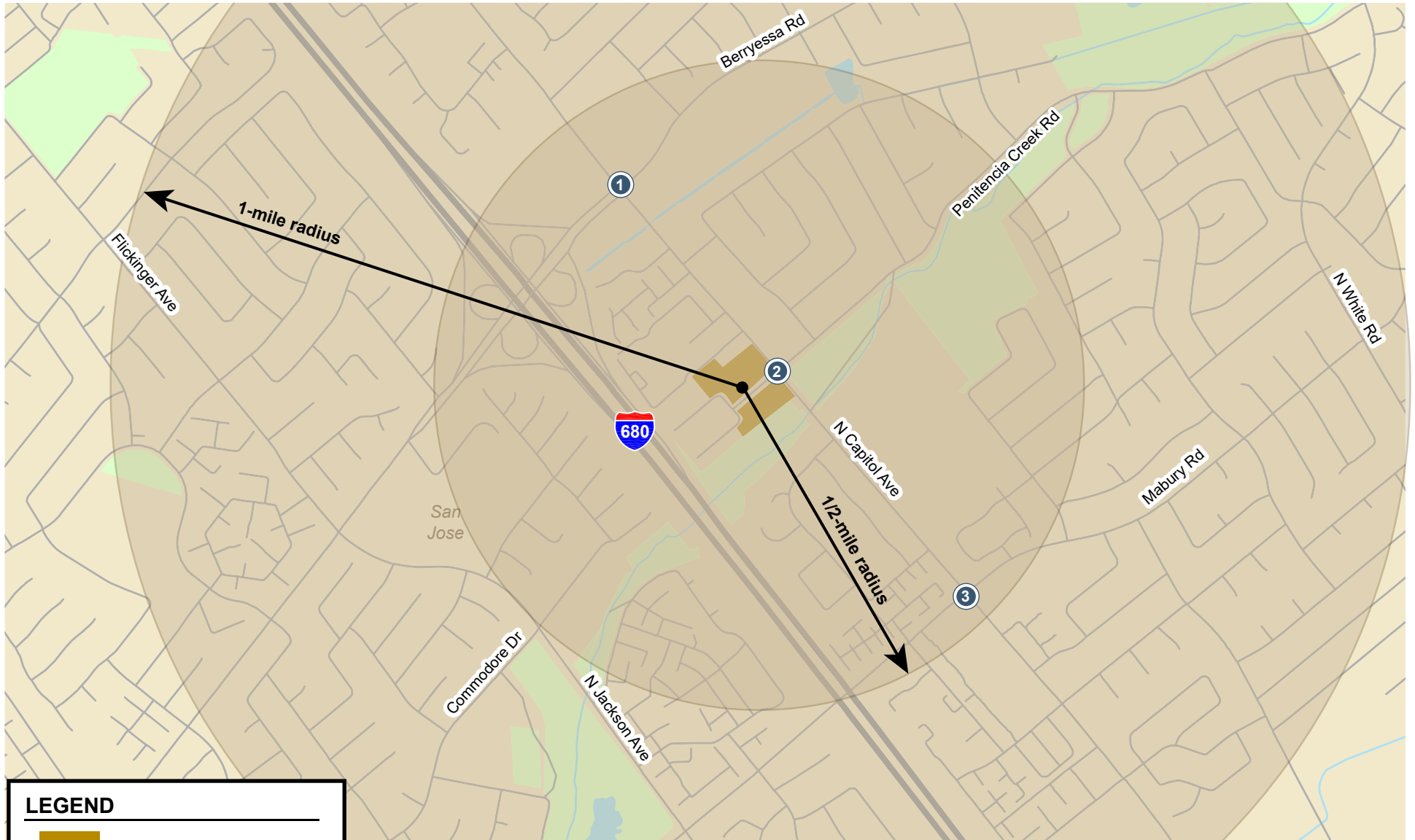
This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a Local Transportation Analysis (LTA). The effects of the project on freeway segments were evaluated in accordance with the methodologies described in the VTA's *Transportation Impact Analysis Guidelines* (2014). The VTA administers the Santa Clara County Congestion Management Program (CMP).

## Transportation Policies



As established in Council Policy 5-1, San Jose evaluates transportation impacts under CEQA based on vehicle miles traveled (VMT). All new projects are required to analyze transportation impacts using the VMT metric and conform to Policy 5-1. The Policy aligns with the Envision San Jose 2040 General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and service land uses to internalize trips and reduce VMT. VMT-based policies support dense, mixed-use, infill projects as established in the General Plan's Planned Growth Areas.

The Envision San Jose 2040 General Plan contains policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT, including the following:

- 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);



**LEGEND**

-  = Site Location
-  = Study Intersection

**Figure 1**  
**Site Location and Study Intersections**





**Figure 2**  
**Site Plan**

- 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);
- 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 (Policy 5-1) establishes procedures for determining project impacts on Vehicle Miles Traveled (VMT) based on the 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 in the project vicinity.

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, and



industrial 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. 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.

Figures 3A and 3B show the current VMT levels estimated by the City for residents and workers, respectively, based on the locations of residences and jobs. Developments in the green-colored areas are estimated to have VMT levels that are below the corresponding thresholds of significance, while the yellow-colored areas are estimated to have VMT levels at the City average (residential) and regional average (employment). The orange- and pink-colored areas are estimated to have VMT levels that are above the thresholds of significance. 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.

The CEQA transportation analysis of the project includes a project-level VMT impact analysis using the City's VMT Evaluation Tool and a cumulative impact analysis that demonstrates the project's consistency with the Envision San Jose 2040 General Plan.

### Screening for VMT Analysis

The City of San Jose's *Transportation Analysis Handbook, 2020* 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. Projects that meet the screening criteria do not require a CEQA transportation analysis but are typically required to provide a Local Transportation Analysis (LTA) to identify potential operational issues that may arise due to the project.

The City's screening criteria for CEQA transportation analysis for Residential Projects and Small Infill Office Projects are described below.

#### **Screening Criteria for Residential Projects**

- 1. Planned Growth Areas:** Located within a Planned Growth Area as defined in the Envision San Jose 2040 General Plan; and
- 2. High-Quality Transit:** Located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and
- 3. Low VMT Areas:** Located in an area in which the per-capita VMT is less than or equal to the CEQA significance threshold for the land use; and
- 4. 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 0.75 FAR or 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; and
- 5. 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
- 6. Active Transportation:** Not negatively impact transit, bike or pedestrian infrastructure.



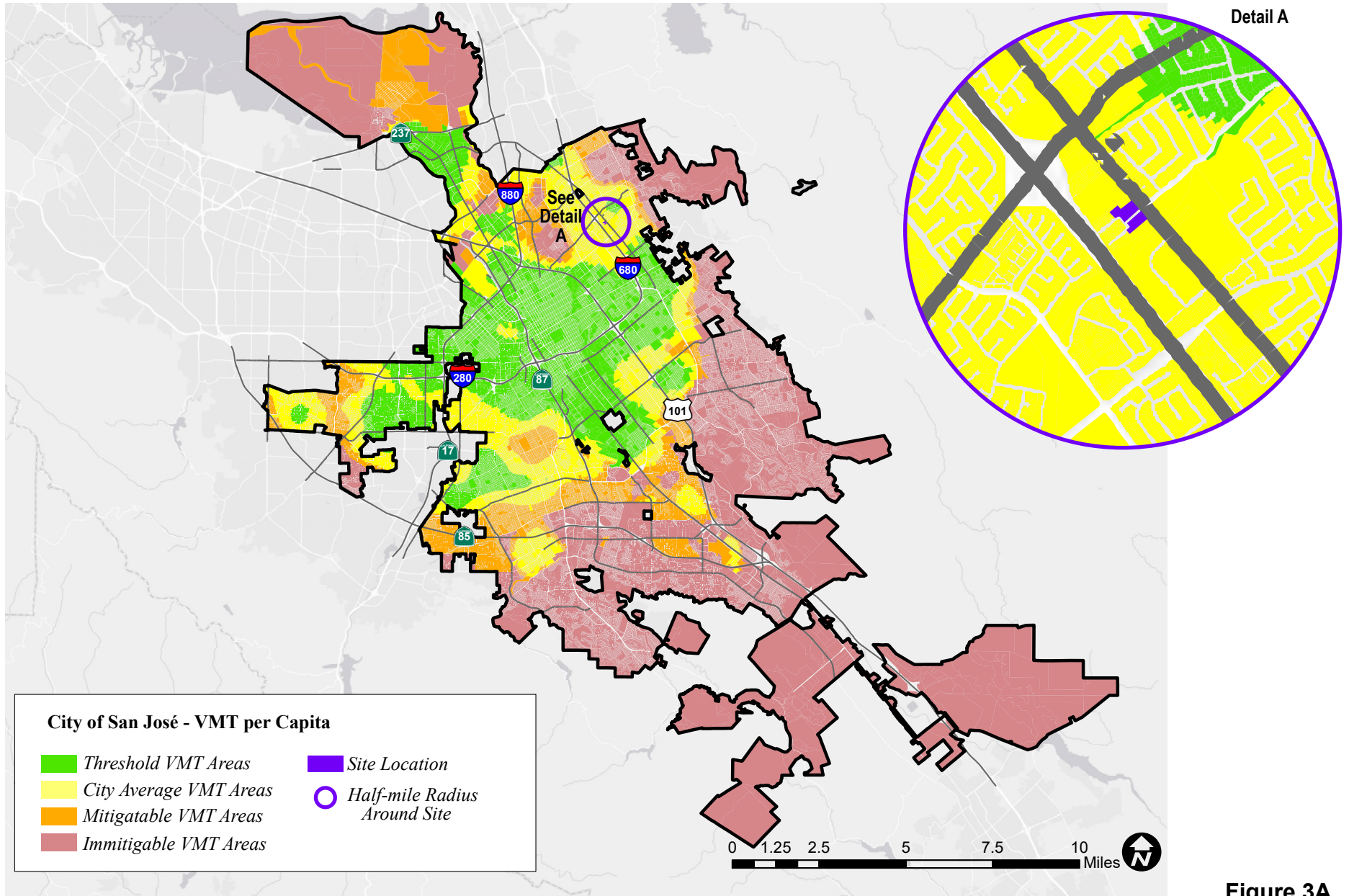


Figure 3A  
VMT Heat Map for Residents in San Jose

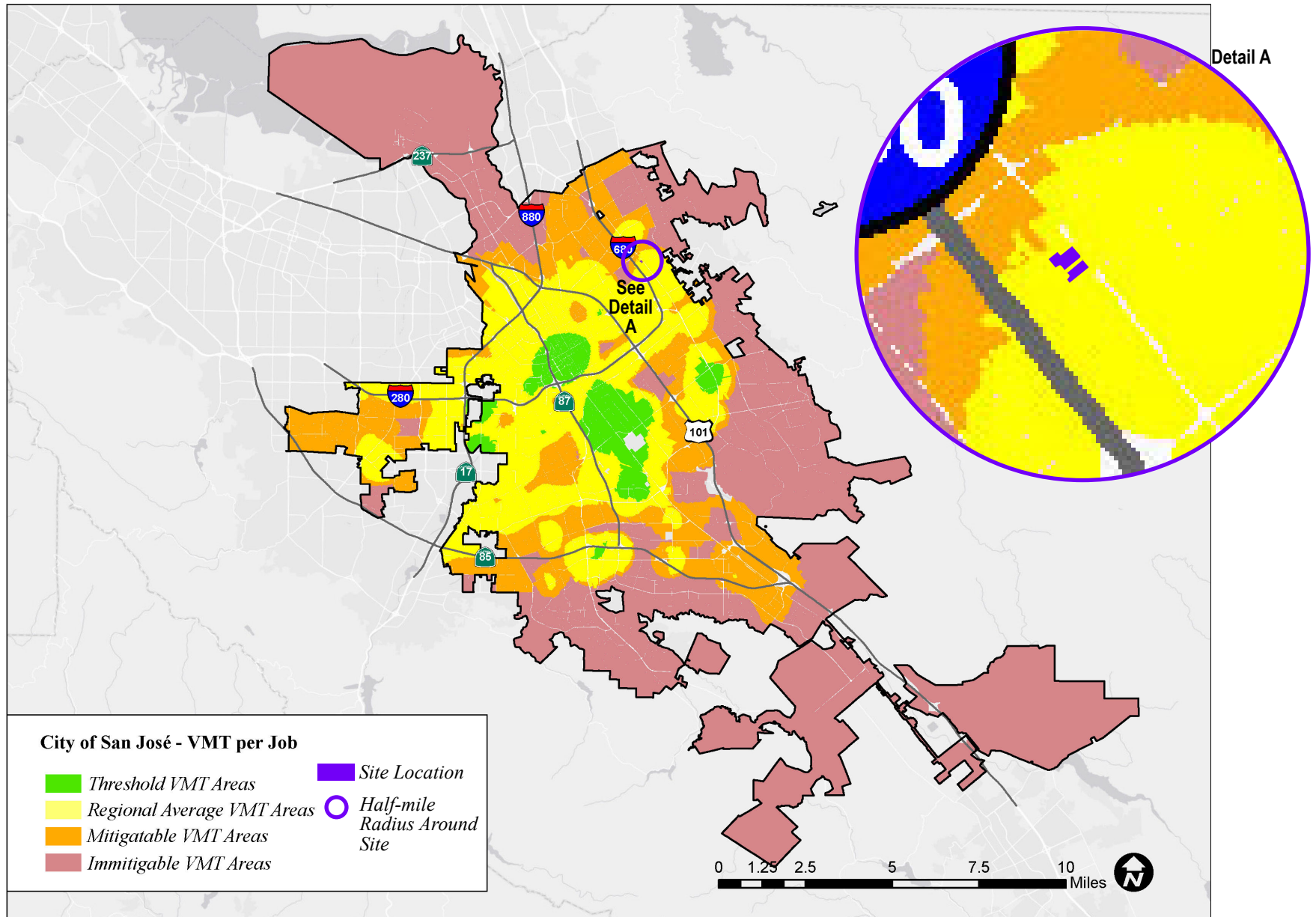


Figure 3B  
VMT Heat Map for Workers in San Jose

### **Screening Criterion for Small Infill Office Projects**

The City's screening criterion for CEQA transportation analysis for small infill office projects is as follows:

1. Office of 10,000 s.f. of gross floor area or less.

The office component of the project would meet the criterion listed above. The residential component of the project would meet all but screening criteria 1 and 3 above as follows:

- Not located within a Planned Growth Area = **Criterion 1 not met**;
- Located within ½ mile of high-quality transit (Penitencia Creek LRT station) = Criterion 2 met;
- Located in an area in which the per-capita VMT is greater than the CEQA significance threshold (see VMT Evaluation Tool summary report) = **Criterion 3 not met**;
- Residential density of 110 DU/AC = Criterion 4 met;
- The project would provide the minimum amount of parking required = Criterion 5 met; and
- The project would not negatively impact transit, bike or ped infrastructure = Criterion 6 met.

As indicated above, the project does not meet all the screening criteria for Residential Projects because the project site is not located within a Planned Growth Area and is located in a high VMT area according to the City's General Plan (see Criterion 3). Therefore, a detailed CEQA transportation analysis is required for the project.

### **Local Transportation Analysis Scope**

The Local Transportation Analysis (LTA) supplements the VMT analysis by identifying potential adverse operational effects that may arise due to a new development, as well as evaluating the effects of a new development on site access, circulation, and other safety-related elements in the project study area.

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: 1) any signalized intersection that is located within a half-mile of the project site, or 2) any signalized intersection that is located within one-mile of the project site and is operating at LOS D or worse. City of San Jose staff may also require LOS analysis at additional intersections at their discretion based on engineering judgement.

Based on these criteria, as outlined in the City's *Transportation Analysis Handbook*, the LTA comprises an analysis of AM and PM peak hour traffic conditions for three (3) signalized intersections (as shown on Figure 1). City staff have approved the list of study intersections. The nearby freeway ramps also were evaluated for potential operational issues (e.g., vehicle queuing and delay).

#### **Study Intersections:**

1. N. Capitol Avenue and Berryessa Road
2. N. Capitol Avenue and Penitencia Creek Road
3. N. Capitol Avenue and Mabury Road

#### **Study Freeway Ramps:**

1. I-680 Northbound Ramps at Berryessa Road
2. I-680 Southbound Ramps at Berryessa Road

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

Traffic conditions were evaluated for the following scenarios:

- **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 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 two years 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 are typically 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. Note that the approved trips associated with the Capitol Ave/Penitencia Crk Creekside Station (Yoneda) project (PDC04-017) were removed from the ATI sheets because this project is built and has been fully occupied for years.
- **Background Plus Project Conditions.** Project conditions reflect projected traffic volumes on the planned roadway network after completion of the project. Project traffic volumes were estimated by adding to existing/background traffic volumes the additional traffic generated by the project.

The LTA also includes an analysis of site access, on-site circulation, vehicle queuing, and effects to transit, bicycle, and pedestrian facilities.

## VMT Analysis Methodology

### Methodology

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, and industrial projects with local traffic. For non-residential or non-office projects, very large projects or projects that can potentially shift travel patterns, the City's Travel Demand Model can be used to determine project VMT. Because the proposed project is a relatively small residential development that would generate local traffic, the VMT Evaluation Tool was used to estimate the project VMT and determine whether the project would result in a significant VMT impact. As previously stated, the office component of the project would meet the City's screening criteria and would not require a CEQA-level VMT analysis.

Based on the assessor's parcel number (APN) of a project, the evaluation tool identifies the existing average VMT per capita and VMT per employee for the area. Based on the project location, type of development, project description, and proposed trip reduction measures, the evaluation tool calculates the project VMT. 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.

The VMT Evaluation Tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. There are four strategy tiers whose effects on VMT can be calculated with the evaluation tool:

1. Project characteristics (e.g., density, diversity of uses, design, and affordability of housing) that encourage walking, biking and transit uses.



2. Multimodal network improvements that increase accessibility for transit users, bicyclists, and pedestrians,
3. Parking measures that discourage personal motorized vehicle-trips, and
4. Transportation demand management (TDM) measures that provide incentives and services to encourage alternatives to personal motorized vehicle-trips.

The first three strategies – land use characteristics, multimodal network improvements, and parking – are physical design strategies that can be incorporated into the project design. TDM includes programmatic measures that aim to reduce VMT by decreasing personal motorized vehicle mode share and by encouraging more walking, biking, and riding transit. TDM measures should be enforced through annual trip monitoring to assess the project's status in meeting the VMT reduction goals.

### Thresholds of Significance

Table 1 shows the VMT thresholds of significance for development projects, as established in the Transportation Analysis Policy. The VMT impact thresholds are 15 percent below the regional average for general employment developments and 15 percent below the citywide average for residential developments. Thus, projects that include residential uses are said to create a significant adverse impact when the estimated project generated VMT exceeds the existing citywide average VMT per capita minus 15 percent. Currently, the reported citywide average is 11.91 daily VMT per capita. This equates to a significant impact threshold of 10.12 daily VMT per capita.

Projects that trigger a significant VMT impact can implement a variety of the four strategies described above to reduce the impact. A significant impact is said to be satisfactorily mitigated when the strategies and VMT reductions implemented render the VMT impact less than significant.

## 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.

All study intersections are located within the City of San Jose and were evaluated based on the City of San Jose level of service standard.

### Data Requirements

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

- existing traffic volumes
- lane configurations
- signal timing and phasing

### Analysis Methodologies and Level of Service Standards

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

**Table 1**  
**VMT Thresholds of Significance for Development Projects**

Project Types	Significance Criteria	Current Level	Threshold
<b>Residential Uses</b>	Project VMT per capita exceeds existing citywide average VMT per capita minus 15 percent, <u>or</u> existing regional average VMT per capita minus 15 percent, whichever is lower.	11.91 VMT per capita (Citywide Average)	10.12 VMT per capita
<b>General Employment Uses</b>	Project VMT per employee exceeds existing regional average VMT per employee minus 15 percent.	14.37 VMT per employee (Regional Average)	12.21 VMT per employee
<b>Industrial Employment Uses</b>	Project VMT per employee exceeds existing regional average VMT per employee.	14.37 VMT per employee (Regional Average)	14.37 VMT per employee
<b>Retail / Hotel / School Uses</b>	Net increase in existing regional total VMT.	Regional Total VMT	Net Increase
<b>Public / Quasi-Public Uses</b>	In accordance with most appropriate type(s) as determined by Public Works Director.	Appropriate levels listed above	Appropriate thresholds listed above
<b>Mixed-Uses</b>	Evaluate each land use component of a mixed-use project independently, and apply the threshold of significance for each land use type included.	Appropriate levels listed above	Appropriate thresholds listed above
<b>Change of Use / Additions to Existing Development</b>	Evaluate the full site with the change of use or additions to existing development, and apply the threshold of significance for each project type included.	Appropriate levels listed above	Appropriate thresholds listed above
<b>Area Plans</b>	Evaluate each land use component of the Area Plan independently, and apply the threshold of significance for each land use type included.	Appropriate levels listed above	Appropriate thresholds listed above

Source: City of San Jose, 2018 *Transportation Analysis Handbook*, Table 2.

### **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 intersections operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersections level of service methodology, the City of San Jose methodology employs the CMP defaults values for the analysis parameters. The City of San Jose level of service standard for intersections is LOS D or better. The correlation between average delay and level of service is shown in Table 2.

### **Adverse Intersection Operations Effects**

According to the City of San Jose's *Transportation Analysis Handbook, 2020*, 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.

**Table 2**  
**Signalized Intersection 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).

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.

## Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at intersections where the project would add a substantial number of trips to the left-turn movements or stop-controlled approaches. For the purpose of this analysis, a substantial number of trips equates to 10 trips per lane. 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

$\lambda$  = 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.

## US 101/Oakland/Mabury Transportation Development Policy

The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. To fund these interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

As part of the Policy, a fee to fund the planned interchange improvements has been adopted. Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the TDP program. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of January 2021) is \$43,696 per each new PM peak hour vehicle trip that would be added to the interchange. This fee is subject to an annual escalation on January 1<sup>st</sup> per the Engineering News-Record Construction Cost Index for San Francisco. Note that the signalized intersections of Oakland Road/US 101 Ramps (South), Oakland Road/US 101 Ramps (North), and Oakland Road/Commercial Street make up the interchange.



## Freeway Segment Analysis Requirement

According to CMP guidelines, an analysis of freeway segment levels of service is only required if a project is estimated to add trips to a freeway segment equal to or greater than one percent of the capacity of that segment. Since the number of project trips added to the freeways in the area is estimated to be below the one percent threshold, a detailed analysis of freeway segment levels of service was not necessary. A simple freeway segment capacity evaluation to substantiate this determination is presented below in Table 3.

**Table 3**  
**Freeway Segment Capacity Evaluation**

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes Capacity (vph) <sup>1</sup>	1% of Mixed-Flow Capacity	Mixed-Flow Lanes Project Trips	1% or More of Capacity?
I-680	McKee Rd to Berryessa Rd	NB	AM	9200	92	7	NO
			PM	9200	92	18	NO
I-680	Berryessa Rd to Hostetter Rd	NB	AM	9200	92	22	NO
			PM	9200	92	15	NO
I-680	Hostetter Rd to Berryessa Rd	SB	AM	9200	92	9	NO
			PM	9200	92	22	NO
I-680	Berryessa Rd to McKee Rd	SB	AM	9200	92	17	NO
			PM	9200	92	12	NO

**Notes:**  
<sup>1</sup> Capacity based on the ideal capacity cited in the *2000 Highway Capacity Manual*.

## Report Organization

This report has a total of six chapters. Chapter 2 describes existing transportation conditions including VMT of the existing land uses in the proximity of the project, the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including the project VMT impact analysis and cumulative transportation impact assessment. Chapter 4 describes the local transportation analysis including operations of study intersections, the methods used to estimate project-generated traffic, the project's effects on the transportation system, and an analysis of other transportation issues including site access and circulation, parking, transit services, bicycle and pedestrian facilities, and vehicle queuing at intersections and freeway ramps. Chapter 5 presents the project's required Transportation Demand Management (TDM) plan. Chapter 6 provides the conclusions of the transportation analysis.

## 2. Existing Transportation Conditions

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This chapter describes the existing conditions of the transportation system within the study area of the project. It presents the vehicle miles traveled (VMT) of the existing land uses in the proximity of the project and describes transportation facilities in the vicinity of the project site, including the roadway network, transit service, and pedestrian and bicycle facilities. The analysis of existing intersection operations is included as part of the Local Transportation Analysis (see Chapter 4).

### VMT of Existing Land Uses

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, and industrial projects. Based on the evaluation tool and the project's APN, the existing VMT for residential uses in the project vicinity (Area VMT) is 11.4 per capita. The current citywide average daily VMT for residential uses is 11.91 per capita (see Table 1 in Chapter 1). Thus, the VMT for existing residential uses in the project vicinity is lower than the citywide average VMT level. Chapter 3 presents the VMT analysis results for the project.

### Existing Roadway Network

Regional access to the project site is provided via I-680. Local access to the project site is provided via N. Capitol Avenue, Berryessa Road, Penitencia Creek Road, and Mabury Road. These facilities are described below.

**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 Berryessa Road interchange. The section of I-680 in the project vicinity is an eight-lane freeway, with four mixed-flow lanes in both directions.

**N. Capitol Avenue** is a north-south four-lane Grand Boulevard with an LRT line within the center median in the study area. As defined by the Envision San Jose 2040 General Plan, Grand Boulevards are major transportation corridors that serve as primary routes for LRT, busses, and other public transit vehicles. Although Grand Boulevards accommodate all modes of travel, priority is given to public transit vehicles. N. Capitol Avenue provides direct access to the project site. It has striped bike lanes on both sides of the street and has a posted speed limit of 40 mph. N. Capitol Avenue provides sidewalks on both sides of the street with pedestrian signal heads and push buttons at all signalized intersections. To the north, N. Capitol Avenue transitions into Great Mall Parkway north of Montague Expressway in the City of Milpitas. To the south, N. Capitol Avenue becomes S. Capitol Avenue south of Alum Rock Avenue and then terminates at Capitol Expressway.

**Berryessa Road** is an east-west City Connector Street that begins where it transitions from Suncrest Avenue at its intersection with Piedmont Road. Berryessa Road is six lanes in the vicinity of the project site and narrows to four lanes west of Commercial Street where it becomes Hedding Street after crossing over US 101. Berryessa Road has a posted speed limit of 40 mph and contains striped bike lanes on both sides of the street. There are sidewalks on both sides of the street. Berryessa Road provides access to the project site via N. Capitol Avenue.

**Penitencia Creek Road** is a two-lane Local Connector Street with a two-way left-turn lane and striped bike lanes on both sides of the street. It extends from N. Capitol Avenue east to where it terminates at Alum Rock Avenue in the east foothills. Penitencia Creek Road has a sidewalk along the north side of the street and a paved multi-use trail along the south side of the street between N. Capitol Avenue and Viceroy Way. East of Viceroy Way, Penitencia Creek Road has a sidewalk along the south side of the street and a paved multi-use trail along the north side of the street. Penitencia Creek Road has a posted speed limit of 35 mph and provides direct access to the project site.

**Mabury Road** is a two- to four-lane City Connector Street with striped bike lanes along much of its length. Mabury Road runs from Oakland Road in the west to Gridley Road in the east, where it changes designation to San Marino Road. Within the study area, Mabury Road provides sidewalks on both sides of the street with pedestrian signal heads and push buttons at all signalized intersections. Mabury Road has a posted speed limit of 40 mph west of N. Capitol Avenue and 35 mph east of N. Capitol Avenue.

## 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 bicycle, pedestrian and transit facilities in the study area are described below.

### Existing Pedestrian Facilities

Sidewalks are found along all previously described local roadways in the study area. The existing network of sidewalks provides good connectivity for pedestrians between the project site and other surrounding land uses and transit stops. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. ADA compliant curb ramps are provided at all the signalized intersections along N. Capitol Avenue, although not all the curb ramps at the N. Capitol Avenue/Penitencia Creek Road and N. Capitol Avenue/Gilchrist Drive intersections meet current ADA standards.

### Existing Bicycle Facilities

Bicycle facilities are divided into three classes of relative significance. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Class III bikeways are bike routes and only have signs and/or Sharrows (bike route lane markings) to help guide bicyclists on recommended routes to certain locations.

There are a number of roadways in the project study area that have Class II bike lanes. Striped bike lanes currently exist on the following roadways:

- Capitol Avenue
- Jackson Avenue
- Berryessa Road
- Penitencia Creek Road
- Mabury Road

The Penitencia Creek multi-use trail system (Class I bikeway) runs alongside Penitencia Creek and separates bicyclists from motor vehicle traffic. Access to the 4-mile multi-use trail is provided via N. Capitol Avenue, a short walk from the project site. This trail system provides access to Penitencia Creek Park and Alum Rock Park. Figure 4 shows the existing bicycle facilities in the study area.

### **Existing Transit Services**

Existing transit services near the project site are provided by the Santa Clara Valley Transportation Authority (VTA). The Penitencia Creek LRT Station is conveniently located a short distance (about 500 feet) from the project site and is served by Light Rail Transit (LRT) and VTA express bus route 104 (see Figure 5).

#### **VTA Light Rail Transit (LRT) Service**

The VTA currently operates the 42.2-mile light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24 hours a day with 15-minute headways during much of the day. The Penitencia Creek LRT Station is served by the Mountain View-Alum Rock LRT Line (Orange Line).

#### **VTA Bus Service**

Local bus route 61 operates along Berryessa Road with stops located approximately ¼-mile north of the project site. Route 61 provides service between Good Samaritan Hospital and the Piedmont Road/Sierra Road intersection with 20-minute headways during the weekday AM and PM peak commute hours. Local bus route 70 operates along Flickinger Avenue and along Berryessa Road west of Flickinger Avenue with stops located about ¾-mile west of the project site. Route 70 provides service between the Milpitas BART station and Eastridge Mall with 20-minute headways during the weekday AM and PM peak commute periods of the day.

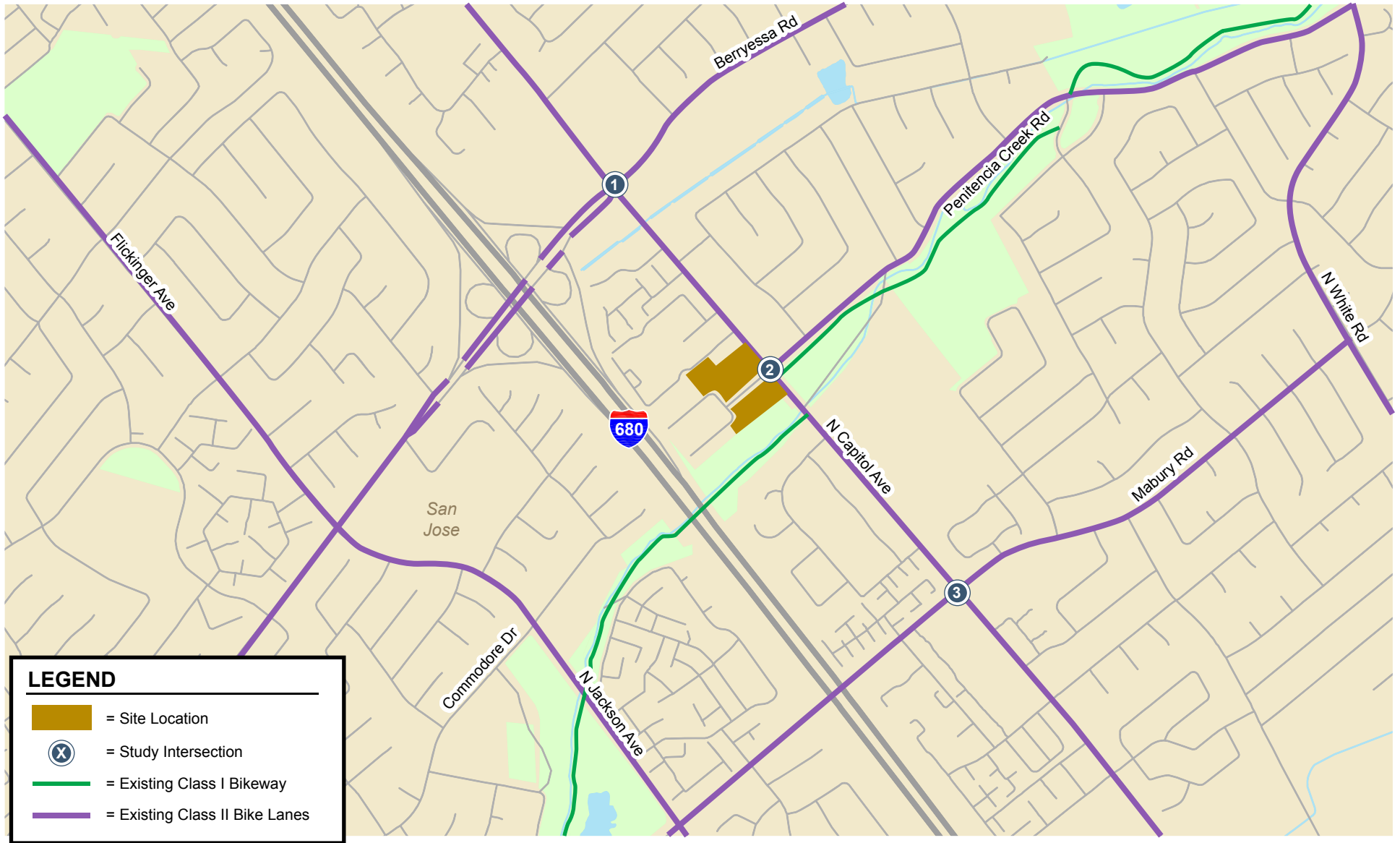
### **Existing Intersection Lane Configurations**

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 6.

### **Observed Existing Traffic Conditions**

Due to the current COVID-19 pandemic situation, traffic volumes are generally lower than under “normal” conditions. However, it is still valuable to observe traffic conditions in the field to identify any existing operational deficiencies. Accordingly, traffic conditions in the study area were observed during the weekday AM (7:00-9:00 AM) and PM (4:00-6:00 PM) peak traffic periods.

In general, the traffic volumes on N. Capitol Avenue are heaviest in the northbound direction during the AM commute period and in the southbound direction during the PM commute period. AM and PM field observations revealed that the study intersections operate acceptably, and the level of service calculations accurately reflect existing conditions. The minor operational issues that were observed are discussed below.



**Figure 4**  
**Existing Bicycle Facilities**

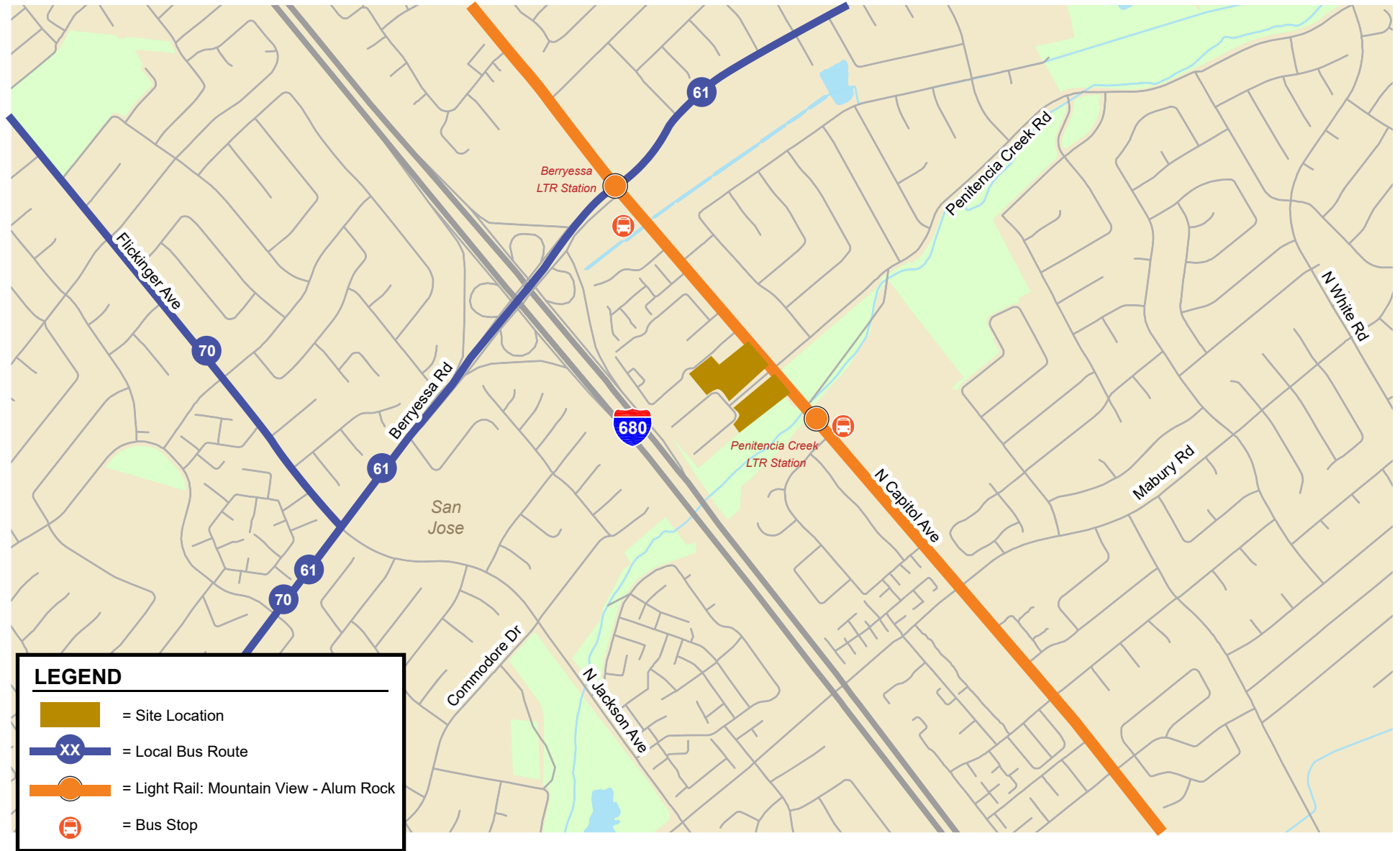
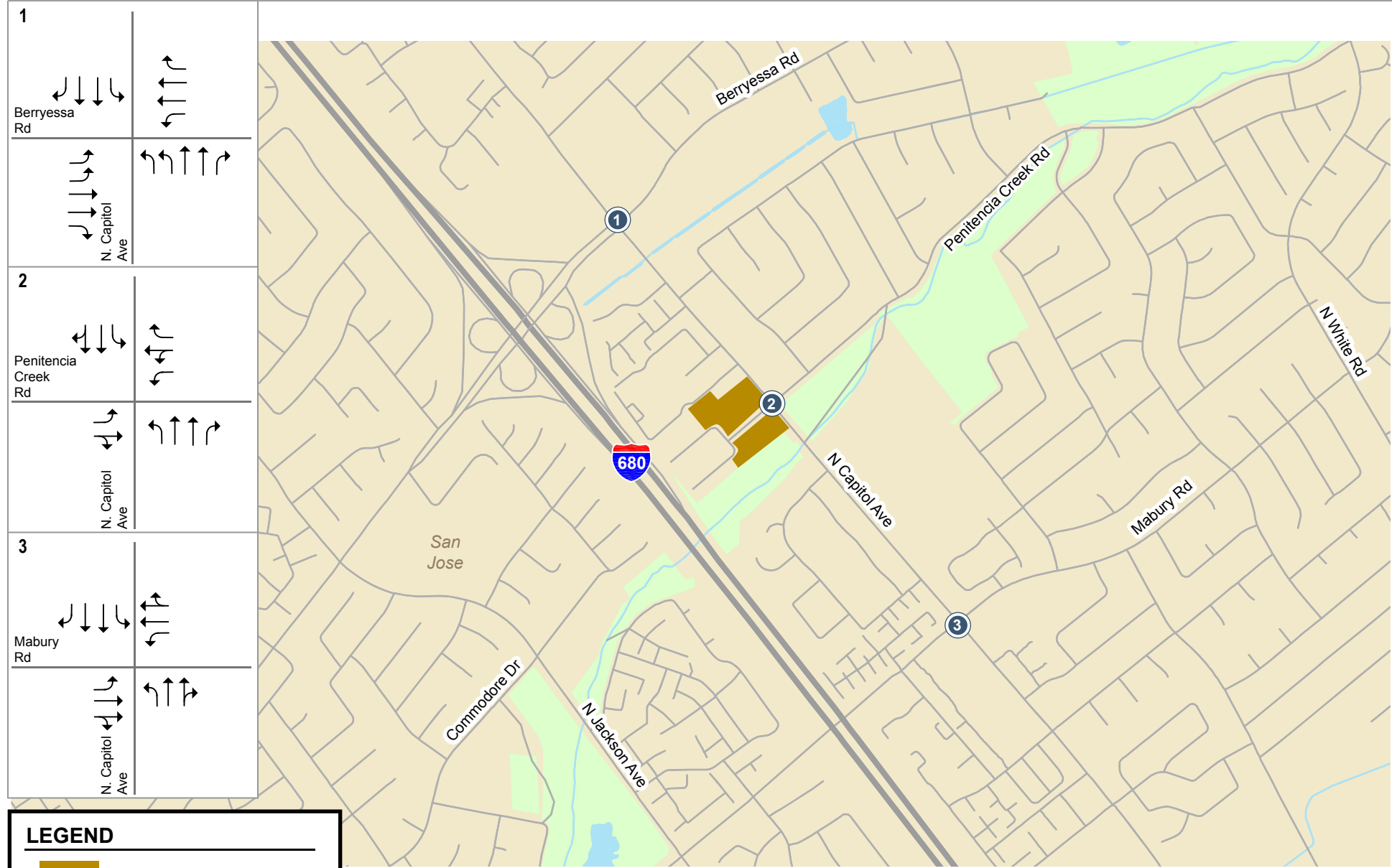




Figure 5  
Existing Transit Services





**LEGEND**

-  = Site Location
-  = Study Intersection

**Figure 6**  
**Existing Intersection Lane Configurations**

### **N. Capitol Avenue and Berryessa Road**

During the AM and PM peak hours, the northbound left-turn movement was heavy. Although the maximum green time provided for the northbound left-turn movement is quite long, two signal cycles were sometimes required for all the queued vehicles to clear the intersection due to the imbalance in lane usage. The majority of vehicles turning left onto westbound Berryessa Road intend to enter northbound I-680. Since the freeway on-ramp is so close to the N. Capitol/Berryessa intersection, most vehicles use the outside left-turn lane (No. 2 lane) so they can easily access the I-680 on-ramp. The inside northbound left-turn lane is, therefore, underutilized due to the disproportionate lane usage. Based on field observations, AM and PM peak hour vehicle queues of up to 11 vehicles and 14 vehicles, respectively, were observed in the No. 2 northbound left-turn lane. The No. 1 (inside) left-turn lane consistently had fewer cars with a maximum observed queue of 8 vehicles. The No. 2 (outside) left-turn lane was full when a queue of 14 vehicles occurred.

During the PM peak hour, the eastbound vehicle queues on Berryessa frequently extended past the I-680 off-ramp. As a result, it occasionally took two signal cycles for all the eastbound queued vehicles to clear the N. Capitol Avenue/Berryessa Road intersection.

### **N. Capitol Avenue and Mabury Road**

During the PM peak hour, the long eastbound through movement vehicle queue at this intersection often prevented vehicles from entering the left-turn pocket and occasionally extended back to Cedarville Lane. As a result, vehicles turning left onto northbound N. Capitol Avenue had to wait to enter the left-turn pocket until the queue dissipated.

### **N. Capitol Avenue and Penitencia Creek Road**

The intersection of N. Capitol Avenue and Penitencia Creek Road was observed to operate without any noteworthy operational issues during both the AM and PM peak hours.



### 3. CEQA Transportation Analysis

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This chapter describes the CEQA transportation analysis, including the VMT threshold of significance, the VMT impact analysis screening criteria, the project-level VMT impact analysis results, and the cumulative transportation impact analysis used to determine consistency with the City's General Plan.

#### Project-Level VMT Impact Analysis

The project-level impact analysis under CEQA uses the VMT metric to evaluate a project's transportation impacts by comparing against the VMT thresholds of significance as established in the Transportation Analysis Policy. The City of San Jose's *Transportation Analysis Handbook, 2020* includes screening criteria for projects that are expected to result in less-than-significant VMT impacts based on the project description, characteristics and/or location. Although the proposed project includes high-density residential development and is located within walking distance of the Penitencia Creek LRT Station, the residential component of the project does not meet the screening criteria (as described in Chapter 1) because the project is not located within a Planned Growth Area according to the City's General Plan, and the project is located in an area in which the per-capita VMT is greater than the CEQA significance threshold. Therefore, a detailed CEQA transportation analysis (i.e., VMT analysis) was prepared for the residential project. Note that the small amount of office space being proposed does meet the City's criterion for small office infill projects.

The San Jose VMT Evaluation Tool was used to estimate the residential project VMT based on the project location (APN), type of development, project description, and proposed trip reduction measures. The threshold of significance for residential uses (see Table 1 in Chapter 1) is used for the VMT analysis. The VMT threshold for residential uses is the existing citywide average daily VMT level (11.91 per capita) minus 15 percent, or 10.12 daily VMT per capita.

#### Project VMT Impact Analysis Results

The project daily VMT estimated by the City's VMT Evaluation Tool is 10.86 per capita. The project VMT, therefore, exceeds the residential threshold of 10.12 daily VMT per capita.

#### Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

#### Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement bike access improvements, pedestrian network improvements, and traffic calming measures (Tier 2 multimodal infrastructure strategies), as well as provide an on-site car

sharing program and a voluntary travel behavior change program (Tier 4 TDM strategies) to mitigate the significant VMT impact. These measures are described below.

### **Bike Access Improvements**

Per the City of San Jose Better Bike Plan 2025, Class IV protected bicycle facility improvements along both sides of N. Capitol Avenue are planned between Penitencia Creek Road and Gilchrist Road. The bicycle facility improvements would connect the eastern and western trailheads of the Penitencia Creek Trail network. The project would construct the planned bike access improvements along N. Capitol Avenue (see Figure 7). Implementation of these improvements would require coordination with the City of San Jose Department of Parks, Recreation & Neighborhood Services (PRNS). These multi-modal infrastructure improvements would promote bicycling, thus reducing drive-alone commute trips. Providing new bicycle facilities that close gaps in existing multi-use trail networks improves bike access and circulation and promotes bicycling as an alternative to driving, thereby reducing VMT.

### **Pedestrian Network Improvements**

The project would construct a new crosswalk on the south leg of the N. Capitol Avenue/Penitencia Creek Road intersection, including pedestrian signal heads with push buttons and new ADA compliant curb ramps. This improvement would provide a safe connection between the eastern and western ends of the Penitencia Creek Trail. Adding this 4<sup>th</sup> crosswalk to the intersection would require signal modifications and re-striping. This improvement would also require California Public Utilities General Order 88-B (CPUC-GO88-B) coordination and approval, since the crosswalk would cross the LRT tracks. Providing pedestrian improvements and enhancing off-site pedestrian connections would encourage people to walk instead of drive, thereby reducing VMT.

### **Traffic Calming Measures**

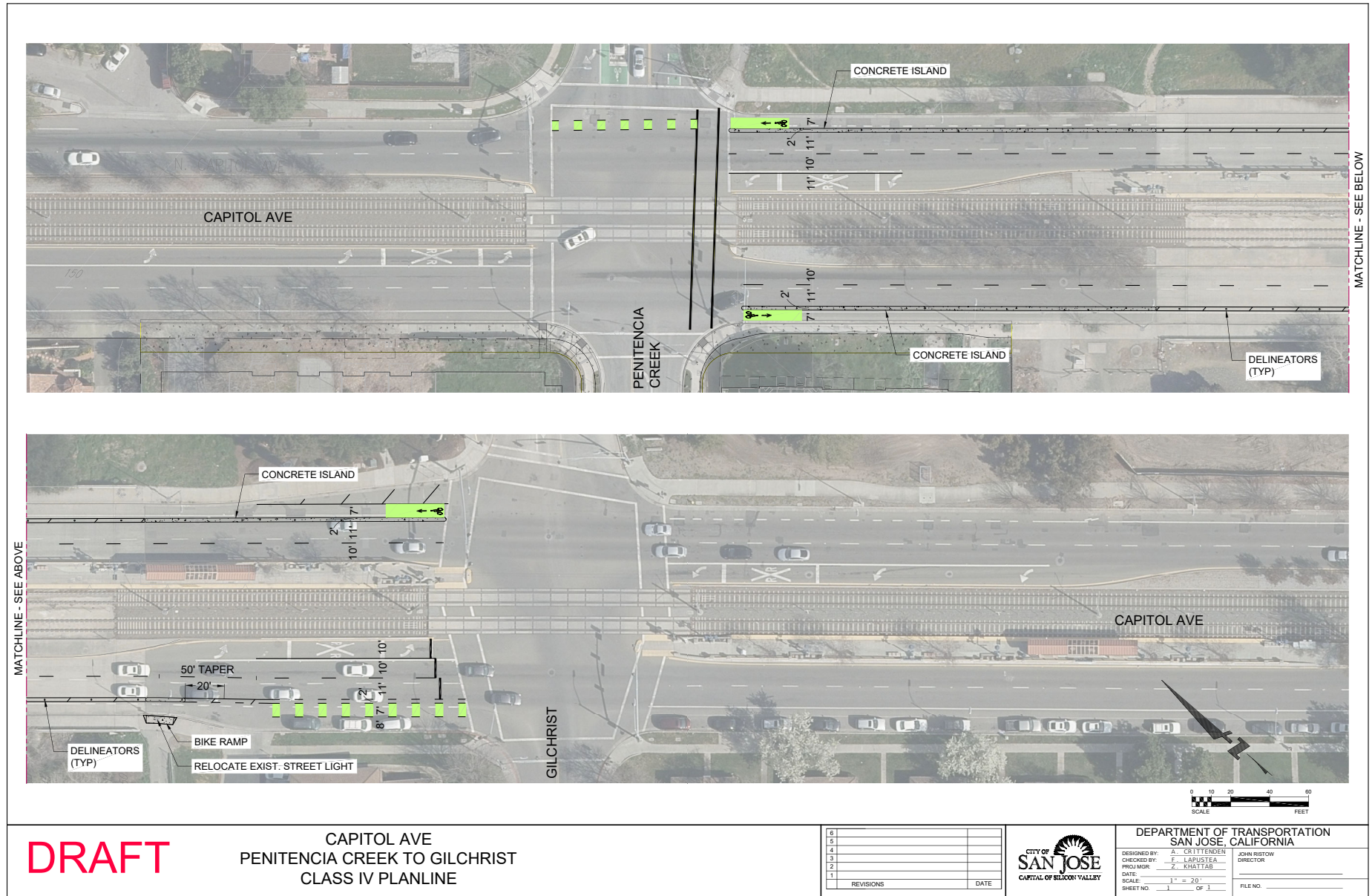
Class IV protected bicycle facility improvements along both sides of N. Capitol Avenue are planned between Penitencia Creek Road and Gilchrist Road. As a result of these bicycle improvements, the existing travel lane widths along Capitol Avenue would be narrowed. Narrowing travel lane widths results in reduced vehicle speeds. The project would construct these planned bicycle improvements. In addition, the project would install all-way stop control and crosswalks (including signage and striping) at the Penitencia Creek Road/Kestral Way intersection. Providing traffic calming measures such as narrowing travel lane widths and adding stop control to intersections creates a safer environment and promotes walking and biking as alternatives to driving. Accordingly, these multi-modal infrastructure improvements would reduce drive-alone commute trips and thus VMT.

### **Car Sharing Program**

The project would provide subsidized memberships to a car sharing program (e.g., Zipcar, City Carshare) for future residents of the apartments upon request. Dedicated car share parking would also be provided in a preferential on-site location. Car sharing services are a low-cost alternative to car ownership and provide flexibility to those who use other transportation modes for their daily commute but may need to access a car for mid-day errands. Car sharing helps support the use of walking, biking, carpooling, and transit by providing another means for business/day trips or a guaranteed ride home option, allowing for overall reductions in automobile use which results in reduced VMT.

### **Voluntary Travel Behavior Change Program**

The project would provide a program that targets individual attitudes and behaviors towards travel and provides information and tools for residents to analyze and alter their travel behavior. Voluntary Travel Behavior Change programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from alternative modes of travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing drive-alone vehicle trips and VMT. All residents/households would be provided with the information/tools necessary to fully participate in the Voluntary Travel Behavior Change program.



**Figure 7**  
**Class IV Bicycle Facility Improvements on N. Capitol Avenue**



## Conclusions of VMT Impact and Mitigation

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 10.04 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 10.12 VMT per capita). The mitigation measures and the resulting reduction in VMT per capita are summarized in Table 4.

**Table 4**  
**Summary of VMT Mitigation Measures and Resulting VMT per Capita**

Mitigation Measure	Mitigation Description	Vehicle Miles Traveled (VMT)		
		VMT Per Capita with Single Mitigation Measure	Residential Threshold (VMT / Capita)	Significant VMT Impact?
1 - Bike Access Improvements (Tier 2)	Per the City of San Jose Better Bike Plan 2025, Class IV protected bicycle facility improvements along N. Capitol Ave are planned between Penitencia Creek Rd and Gilchrist Rd. The bicycle facility improvements would help connect the eastern and western ends of the Penitencia Creek Trail. The project should construct these planned bike access improvements along N. Capitol Ave. Implementation of these improvements would require coordination with the City of San Jose Department of Parks, Recreation & Neighborhood Services (PRNS). These multi-modal infrastructure improvements would promote bicycling, thus reducing drive-alone commute trips. Providing new bicycle facilities that close gaps in existing multi-use trail networks improves bike access and circulation and promotes bicycling as an alternative to driving.	10.84	10.12	YES
2 - Pedestrian Network Improvements (Tier 2)	The project would construct a new crosswalk on the south leg of the N. Capitol Ave/Penitencia Creek Rd intersection, including pedestrian signal heads with push buttons and new ADA compliant curb ramps. This improvement would provide a safe connection between the eastern and western ends of the Penitencia Creek Trail. Adding this 4th crosswalk to the intersection would require signal modifications and re-striping. This improvement would also require California Public Utilities General Order 88-B (CPUC-GO88-B) coordination and approval, since the crosswalk would cross the LRT tracks. Providing pedestrian improvements and enhancing off-site pedestrian connections would encourage people to walk instead of drive.	10.64	10.12	YES
3 - Traffic Calming Measures (Tier 2)	Class IV protected bicycle facility improvements along N. Capitol Ave are planned between Penitencia Creek Rd and Gilchrist Rd. As a result of these bicycle improvements, the existing travel lane widths along Capitol Ave would be narrowed. Narrowing travel lane widths results in reduced vehicle speeds. The project should construct these planned bicycle improvements. In addition, the project would install all-way stop control and crosswalks (including signage and striping) at the Penitencia Creek Rd/Kestral Wy intersection. Providing traffic calming measures such as narrowing travel lane widths and adding stop control to intersections creates a safer environment and promotes walking and biking as alternatives to driving. Accordingly, these multi-modal infrastructure improvements would reduce drive-alone commute trips.	10.64	10.12	YES
4 - Car Sharing Program (Tier 4)	The project would provide subsidized memberships to a car sharing program (e.g., Zipcar, City Carshare) for future residents of the apartments upon request. Dedicated car share parking would also be provided in a preferential on-site location. Car sharing services are a low-cost alternative to car ownership and provide flexibility to those who use other transportation modes for their daily commute but may need to access a car for mid-day errands. Car sharing helps support the use of walking, biking, carpooling, and transit by providing another means for business/day trips or a guaranteed ride home option, allowing for overall reductions in automobile use.	10.80	10.12	YES
5 - Voluntary Travel Behavior Change Program (Tier 4)	The project would provide a program that targets individual attitudes and behaviors towards travel and provides information and tools for residents to analyze and alter their travel behavior. Voluntary Travel Behavior Change programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from alternative modes of travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing drive-alone vehicle trips and VMT. All residents/households would be provided with the information/tools necessary to fully participate in the Voluntary Travel Behavior Change program.	10.53	10.12	YES
<b>VMT Per Capita with Implementation of all 5 Mitigation Measures:</b>		<b>10.04</b>	<b>10.12</b>	<b>NO</b>

Figures 8A and 8B show the VMT summary reports generated by the City of San Jose's VMT Evaluation Tool without and with implementation of the recommended mitigation measures, respectively. The column chart at the bottom of each figure shows the Area VMT (red column), Project VMT (blue and green columns), and the Impact Threshold for residential uses (bold black line at the top of the chart).

## Cumulative Impact Analysis

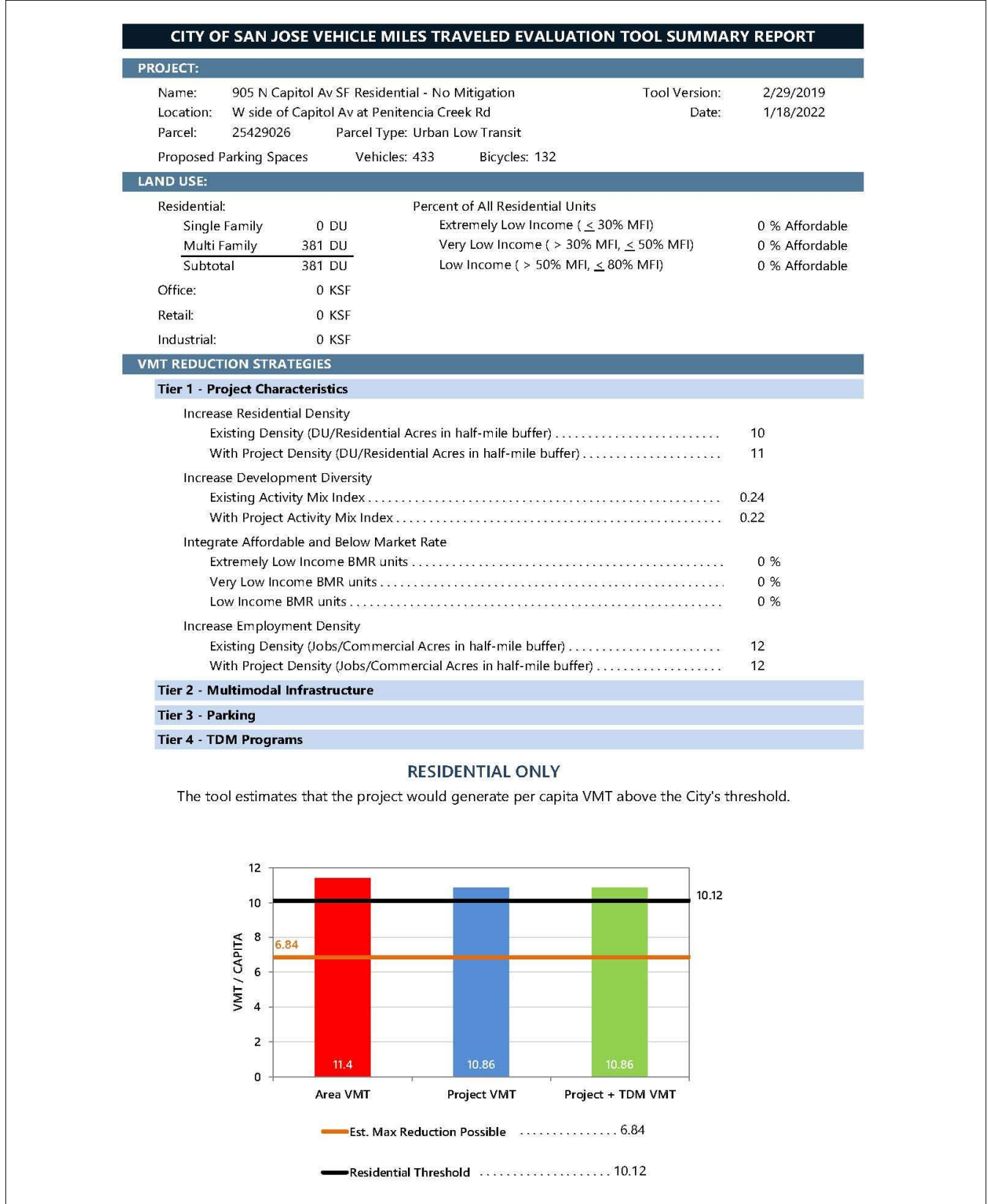
Projects must demonstrate consistency with the Envision San Jose 2040 General Plan to address cumulative impacts. Consistency with the City's General Plan is based on the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the City's *Transportation Analysis Handbook*.

The project site (both parcels) is designated *Transit Residential* on the Land Use/Transportation Diagram of the Envision San Jose 2040 General Plan. This is the primary land use designation for high-density residential or mixed-use residential and commercial development sites located in close proximity to transit, jobs, amenities and services, and supports development with a density between 50 and 250 dwelling units per acre (DU/AC) and a floor area ratio (FAR) from 2.0 to 12.0.

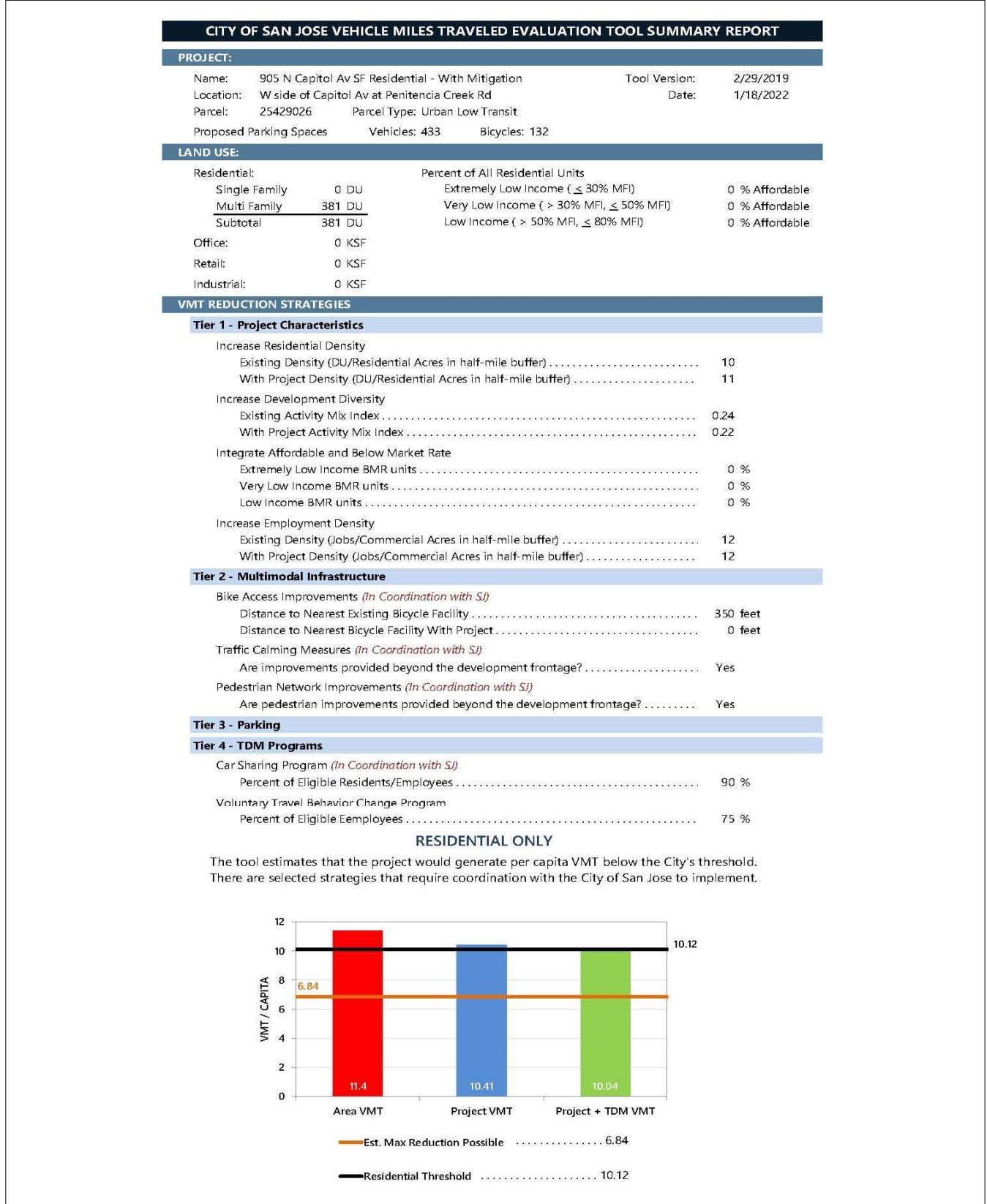
As proposed, the residential project would develop a total of 381 dwelling units on the two parcels that make up the project site. This would result in a combined development density of approximately 110 DU/AC ( $381 \text{ DU} / 3.47 \text{ AC} = 110 \text{ DU/AC}$ ), which would be consistent with the density of the General Plan land use designation. The project would also include a small amount of office space, which would be consistent with the mixed-use residential and commercial development allowed under the Transit Residential land use designation.

Since the project would conform to the current General Plan, a General Plan Amendment (GPA) would not be required. The project would be 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.

**Figure 8A  
San Jose VMT Evaluation Tool Summary Report – No Mitigation**



**Figure 8B**  
**San Jose VMT Evaluation Tool Summary Report – With Mitigation**



## 4. Local Transportation Analysis

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This chapter describes the local transportation analysis including the method by which project traffic is estimated, intersection operations analysis for background plus project conditions, any adverse effects to intersection level of service caused by the project, intersection vehicle queuing analysis, site access and on-site circulation review, effects on bicycle, pedestrian and transit facilities, and parking.

### Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of San Jose intersections and to identify potential negative 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. It is assumed in this analysis that the future transportation network with the project would be the same as the existing transportation network.

### Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, 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

Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. This research is compiled in the *Trip Generation Manual, 10<sup>th</sup> Edition* (2017) published by the Institute of Transportation Engineers (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development.

Trips that would be generated by the project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Small Office Building" (Land Use 712) located in a General Urban/Suburban setting. The Land Use 221 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. As proposed, both residential buildings (apartment building and townhouse building) would be at least 3 stories tall but less than 10 stories tall. Thus, the same trip rates were applied to both the apartments and the townhomes.



## **Trip Adjustments and Reductions**

In accordance with San Jose's *Transportation Analysis Handbook* (April 2020, 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.

### *Location-Based Trip Adjustment*

Based on the 2020 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 the place type "Urban Low Transit". Therefore, the baseline project trips were adjusted to reflect an Urban Low Transit mode share. Residential and office developments within this area type have vehicle mode shares of 87% and 91%, respectively (according to Table 6 of the City's *Transportation Analysis Handbook*). The reductions were 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 13% and 9% trip reductions are based on the percent mode share for other modes of travel besides automobiles.

### *Project-Specific Residential Trip Reduction*

The total VMT reduction resulting from Tier 1 VMT reduction strategies (i.e., project characteristics) were applied as part of the project trip generation estimates. The VMT Evaluation Tool calculates the total Tier 1 VMT reduction based on the following list of project characteristics: Increase Residential Density, Increase Employment Density, Increase Development Diversity, and Integrate Affordable and Below Market Rate units. Based on the proposed project, the VMT Evaluation Tool calculated a 5% external trip reduction due to the increased residential density for the site.

## **Net Project Trips**

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 1,758 new daily vehicle trips, with 120 new trips occurring during the AM peak hour and 146 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the *ITE Trip Generation Manual*, the project would produce 34 new inbound and 86 new outbound trips during the AM peak hour, and 88 new inbound and 58 new outbound trips during the PM peak hour (see Table 5).

## **Trip Distribution and Assignment**

The trip distribution pattern for the residential project was estimated based on existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM commute patterns, the locations of complementary land uses, and freeway access points. The AM and PM peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern. Figure 9 shows the project trip distribution pattern and trip assignment.

## **Traffic Volumes Under All Scenarios**

### **Existing Traffic Volumes**

Due to 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 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 two years old). Accordingly, a 1% annual growth factor was applied to the turning movement counts provided by City staff for this project. The existing peak-hour intersection volumes are shown on Figure 10.

**Table 5**  
**Project Trip Generation Estimates**

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour			PM Peak Hour				
				Pk-Hr Rate	In	Out	Total	Pk-Hr Rate	In	Out	Total
8 Plex Townhomes (3 Stories) <sup>1</sup>	32 DU	5.44	174	0.36	3	9	12	0.44	9	5	14
Apartments (7 Stories) <sup>1</sup>	349 DU	5.44	1,899	0.36	33	93	126	0.44	94	60	154
<i>Location-Based Vehicle Mode Share (13%)<sup>2</sup></i>			(269)		(5)	(13)	(18)		(13)	(9)	(22)
<i>Project-Specific Trip Reduction (5%)<sup>3</sup></i>			(90)		(2)	(4)	(6)		(4)	(3)	(7)
<b>Net Residential Trips:</b>			<b>1,714</b>		<b>29</b>	<b>85</b>	<b>114</b>		<b>86</b>	<b>53</b>	<b>139</b>
Ground Floor Office <sup>1</sup>	3,000 SF	16.19	49	1.92	5	1	6	2.45	2	5	7
<i>Location-Based Vehicle Mode Share (9%)<sup>2</sup></i>			(4)		0	0	0		0	0	0
<b>Net Office Trips:</b>			<b>45</b>		<b>5</b>	<b>1</b>	<b>6</b>		<b>2</b>	<b>5</b>	<b>7</b>
<b>Total Net Project Trips:</b>			<b>1,758</b>		<b>34</b>	<b>86</b>	<b>120</b>		<b>88</b>	<b>58</b>	<b>146</b>

**Notes:**

<sup>1</sup> Trip generation based on average rates contained in the *ITE Trip Generation Manual, 10th Edition*, for Multifamily Housing Mid-Rise (Land Use 221) and Small Office Building (Land Use 712) located in a General Urban/Suburban setting. Rates are expressed in trips per DU and per 1,000 s.f., respectively.

<sup>2</sup> A 13% reduction was applied to the residential component and a 9% reduction was applied to the office component based on the location-based vehicle mode share % outputs (Table 6 of TA Handbook) produced from the San Jose Travel Demand Model for place type: Urban Low Transit.

<sup>3</sup> A 5% reduction was applied to the residential component of the project based on the external trip adjustments obtained from the City's VMT Evaluation Tool due to the increased residential density for the site as a result of the project.

### **Background Traffic Volumes**

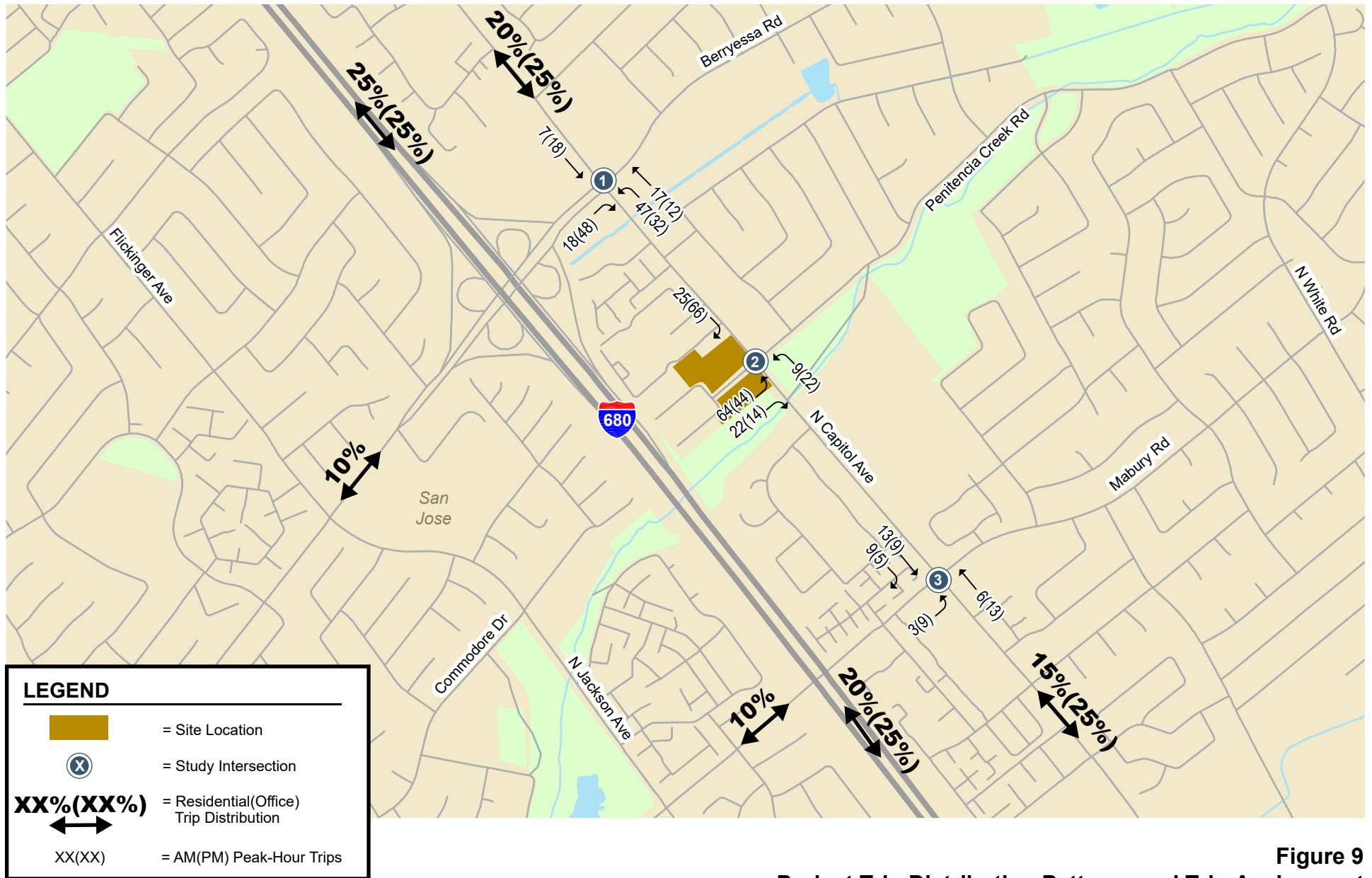
Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed developments. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (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 background peak-hour intersection volumes are shown on Figure 11.

The ATI sheets are contained in Appendix B. Note that the approved trips associated with the Capitol Avenue/Penitencia Creek Creekside Station (Yoneda) project (PDC04-017) were removed from the ATI sheets because this project is built and has been occupied for years.

### **Background Plus Project Traffic Volumes**

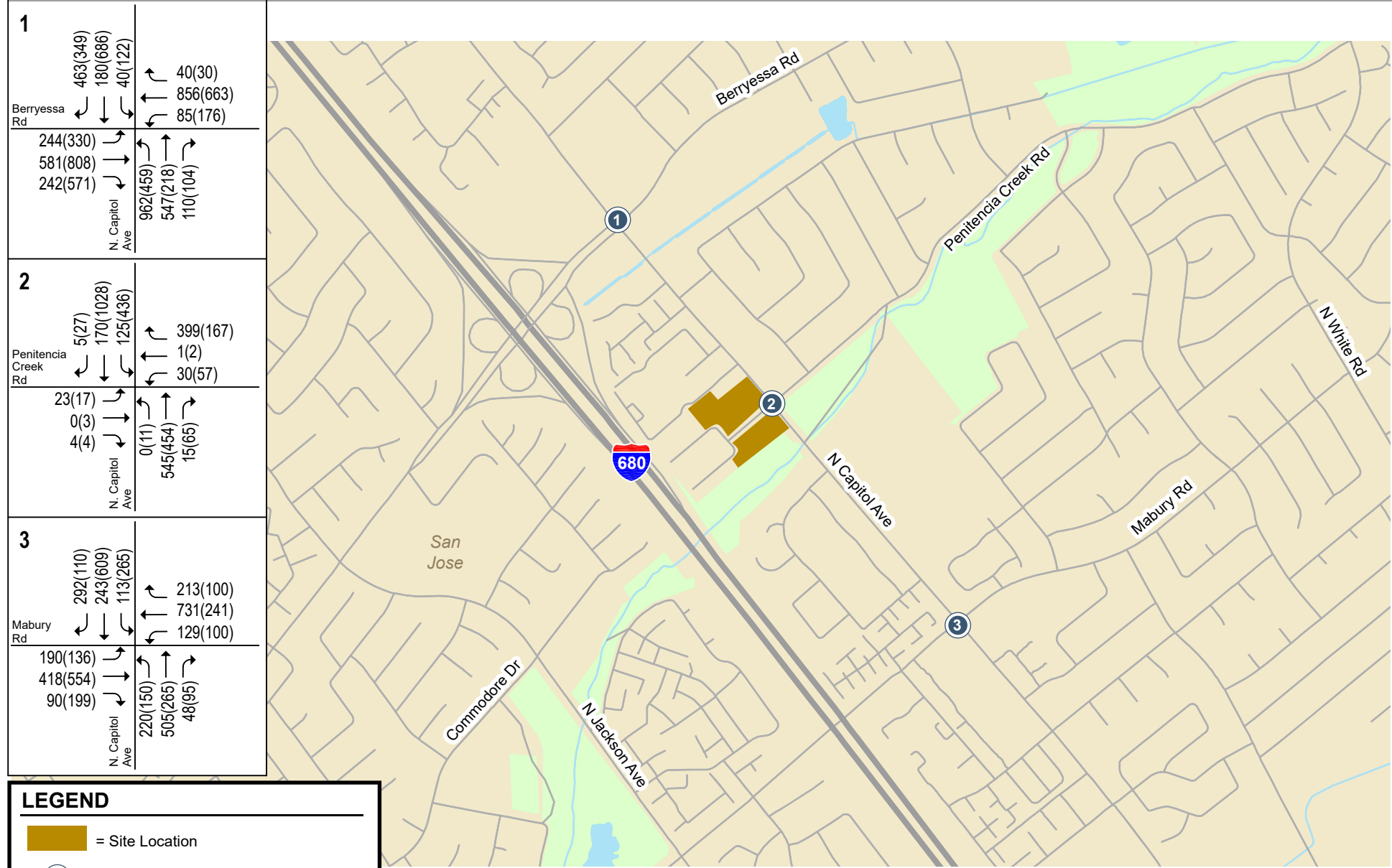
Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 12).

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



**Figure 9**  
Project Trip Distribution Patterns and Trip Assignment

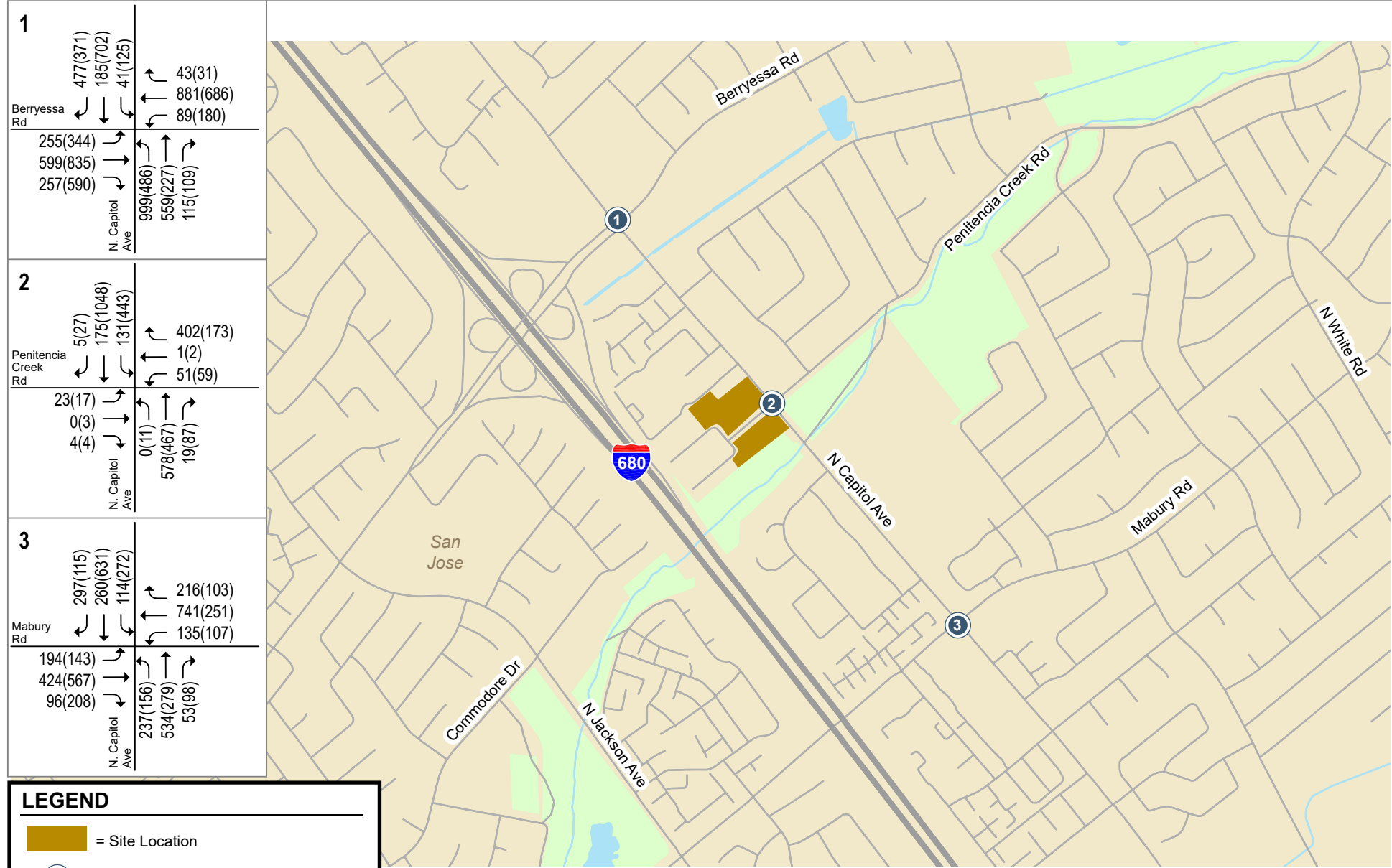
905 N Capitol Ave Transportation Analysis



**LEGEND**

- = Site Location
- X = Study Intersection
- XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 10**  
**Existing Traffic Volumes**



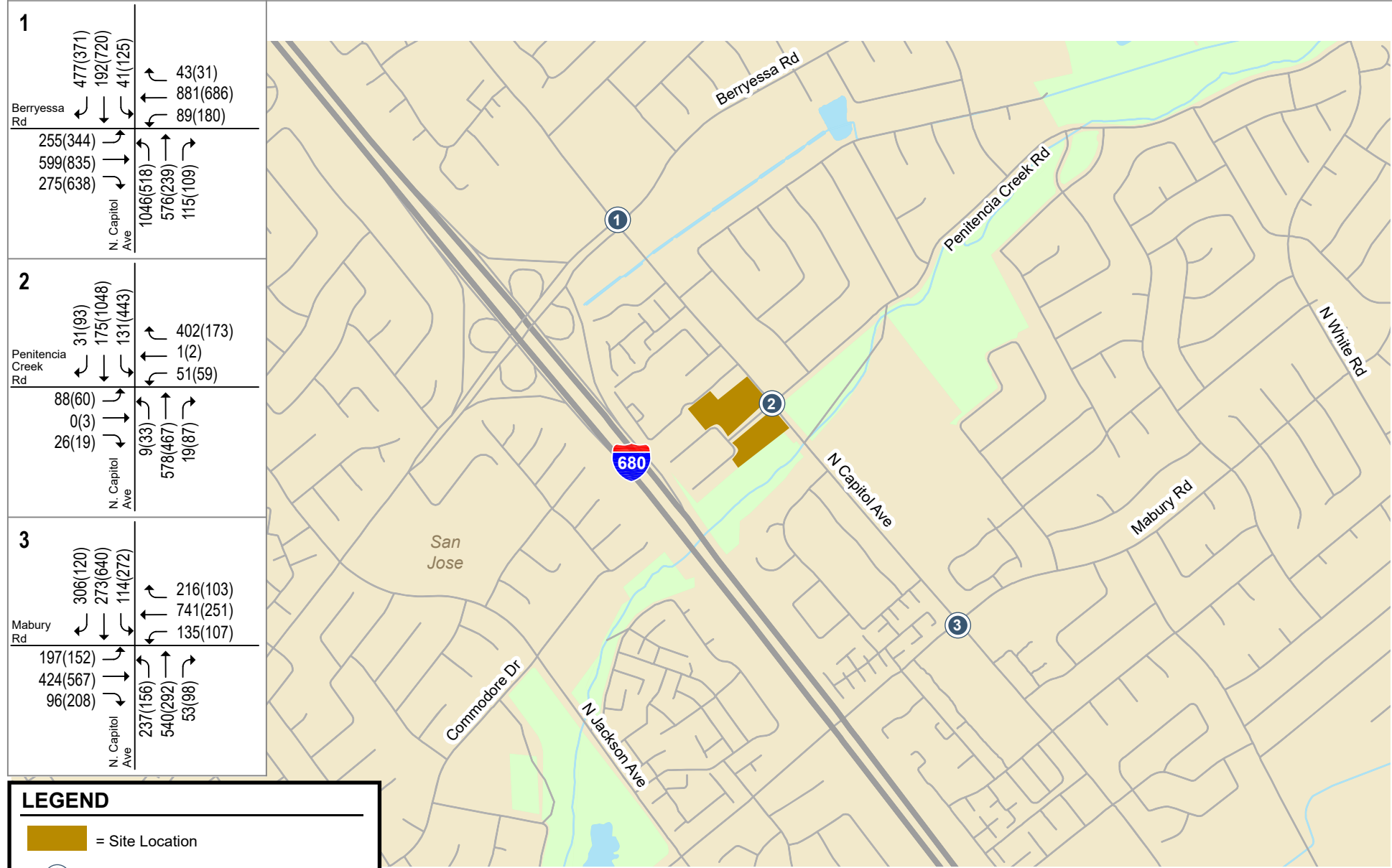
**LEGEND**

- = Site Location
- X = Study Intersection
- XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 11**  
**Background Traffic Volumes**



905 N Capitol Ave Transportation Analysis



**LEGEND**

= Site Location

= Study Intersection

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

**Figure 12**  
**Background Plus Project Traffic Volumes**

## Intersection Traffic Operations

Intersection levels of service were evaluated based on the standards of the City of San Jose. The results of the analysis show that all but one of 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 and background plus project conditions (see Table 6). The intersection of N. Capitol Avenue and Berryessa Road is operating at an unacceptable LOS E during the PM peak hour of traffic under existing and background conditions and would continue to do so under background plus project conditions. However, the project would not have an adverse effect on intersection operations according to the City's operational thresholds.

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

**Table 6**  
**Intersection Level of Service Summary**

ID	Signalized Intersection	Peak Hour	Count Date	Existing		Background		Background Plus Project			
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	N Capitol Av & Berryessa Rd	AM	10/27/15	48.1	D	50.1	D	51.2	D	2.2	0.016
		PM	10/27/15	<b>55.1</b>	<b>E</b>	<b>55.8</b>	<b>E</b>	<b>56.4</b>	<b>E</b>	<b>0.8</b>	<b>0.016</b>
2	N Capitol Av & Penitencia Creek Rd	AM	04/04/18	28.1	C	28.1	C	32.2	C	2.2	0.042
		PM	04/04/18	23.3	C	23.5	C	24.5	C	1.5	0.027
3	N Capitol Av & Mabury Rd	AM	09/25/18	39.5	D	39.8	D	40.0	D	0.2	0.004
		PM	09/25/18	38.9	D	39.4	D	39.5	D	0.2	0.004

Notes:  
**Bold** indicates a substandard level of service per City of San Jose standards.

## Intersection Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at intersections where the project would add a noteworthy number of trips to the left-turn movements (see Table 7). For the purpose of this analysis, a noteworthy number of trips equates to 10 trips or more per lane. Based on this threshold and the project trip assignment, the following left-turn movements were evaluated:

- N. Capitol Av and Berryessa Rd – Northbound Left-Turn
- N. Capitol Av and Penitencia Creek Rd – Northbound Left-Turn and Eastbound Left-Turn

### N. Capitol Avenue and Berryessa Road

The queuing analysis indicates that the maximum vehicle queues for the dual northbound left-turn pocket at the N. Capitol Avenue/Berryessa Road intersection currently exceed the existing vehicle storage capacity and would continue to do so under both background and background plus project conditions during the AM and PM peak hours of traffic. However, it is important to note that based on field observations (see the end of Chapter 2) the maximum queue observed was 14 vehicles long (in the no. 2 left-turn lane), which could be accommodated. The queue calculations shown in Table 7

(maximum queue of 25 vehicles per lane) are based on pre-Covid conditions (i.e., adjusted intersection counts), which are being estimated for the purpose of this transportation analysis.

The northbound left-turn lanes each provide approximately 325 feet of vehicle storage, which can accommodate 14 vehicles per lane (based on field observations). The project would increase the 95<sup>th</sup> percentile vehicle queue by just 1 vehicle per lane compared to background conditions during both the AM and PM peak hours. Extending the northbound left-turn pocket would not be possible due to the adjacent LRT tracks and limited space available adjacent to the tracks. Note also that lengthening the northbound left-turn pocket would be ineffective at improving the operational issue associated with the lane utilization imbalance due to the proximity of the northbound I-680 on-ramp.

**Table 7**  
**Intersection Queuing Analysis Summary**

Measurement	N Capitol Av & Berryessa Av		N Capitol Av & Penitencia Creek Rd			
	NBL		NBL		EBL	
	AM	PM	AM	PM	AM	PM
<b>Existing</b>						
Cycle/Delay <sup>1</sup> (sec)	136	180	112	130	112	130
Volume (vphpl)	481	230	0	11	23	17
95th %. Queue (veh./ln.)	25	17	0	2	2	2
95th %. Queue (ft./ln.) <sup>2</sup>	625	425	0	50	50	50
Storage (ft./ln.) <sup>3</sup>	325	325	125	125	150	150
Adequate (Y/N)	<b>N</b>	<b>N</b>	Y	Y	Y	Y
<b>Background</b>						
Cycle/Delay <sup>1</sup> (sec)	136	180	112	130	112	130
Volume (vphpl)	500	243	0	11	23	17
95th %. Queue (veh./ln.)	26	18	0	2	2	2
95th %. Queue (ft./ln.)	650	450	0	50	50	50
Storage (ft./ln.) <sup>3</sup>	325	325	125	125	150	150
Adequate (Y/N)	<b>N</b>	<b>N</b>	Y	Y	Y	Y
<b>Background Plus Project</b>						
Cycle/Delay <sup>1</sup> (sec)	136	180	112	130	112	130
Volume (vphpl)	523	259	9	33	88	60
95th %. Queue (veh./ln.)	27	19	1	3	6	5
95th %. Queue (ft./ln.) <sup>2</sup>	675	475	25	75	150	125
Storage (ft./ln.) <sup>3</sup>	325	325	125	125	150	150
Adequate (Y/N)	<b>N</b>	<b>N</b>	Y	Y	Y	Y
<b>Notes:</b>						
<sup>1</sup> Vehicle queue calculations based on cycle length.						
<sup>2</sup> Assumes 25 Feet Per Vehicle Queued.						
<sup>3</sup> Storage Length represents the length of turn pocket + taper.						

## N. Capitol Avenue and Penitencia Creek Road

The results of the queuing analysis show that adequate vehicle storage is currently provided and would continue to be provided under background and background plus project conditions to accommodate the maximum vehicle queues that would develop for the northbound and eastbound left-turn movements at the N. Capitol Avenue/Penitencia Creek Road intersection. Note that an eastbound left-turn queue of 4 vehicles or more would momentarily prevent vehicles from entering the left-turn pocket from the easternmost driveway that would serve the townhomes.

## US 101/Oakland/Mabury Transportation Development Policy

The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. To fund these interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

As part of the Policy, a fee to fund the planned interchange improvements has been adopted. Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the TDP program. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of January 2021) is \$43,696 per each new PM peak hour vehicle trip that would be added to the interchange. This fee is subject to an annual escalation on January 1<sup>st</sup> per the Engineering News-Record Construction Cost Index for San Francisco. Note that three signalized intersections make up the interchange: Oakland Road/US 101 Ramps (South), Oakland Road/US 101 Ramps (North), and Oakland Road/Commercial Street.

Based on the site location and project trip distribution patterns (see Figure 8), it is estimated that the project would add 7 new PM peak hour vehicle trips to the US 101/Oakland Road interchange. Therefore, the project would be required to pay \$305,872 to help fund the intersection improvements discussed in the US 101/Oakland/Mabury TDP as calculated below.

**US 101/Oakland/Mabury TDP Impact Fee: \$43,696 x 7 PM peak hour trips = \$305,872**

## Freeway On-Ramp Operations

An evaluation of metered freeway on-ramps providing access to I-680 from the project site was performed to identify the effects of the addition of project traffic on the vehicle queues at the metered ramps. The meters serving the northbound diagonal and loop on-ramps are operating during the AM peak hour of traffic. None of the I-680 on-ramps are metered during the PM peak hour.

### I-680 Northbound Diagonal On-Ramp

Based on field observations, the maximum vehicle queue on the metered I-680 northbound diagonal on-ramp was only 6 vehicles in length during the AM peak hour. Due to the short vehicle queues on the on-ramp, no operational issues related to vehicle queuing or delay currently occur on the on-ramp or on Berryessa Road. It is estimated that the project would add 22 AM peak hour vehicle trips to the on-ramp, and only 15 trips during the PM peak hour. Thus, it can be concluded that the addition of project trips would not create any vehicle queuing or delay issues on the diagonal on-ramp or on Berryessa Road.

## Site Access and On-Site Circulation

The site access and circulation evaluations are based on the April 15<sup>th</sup> 2021 (townhomes) and September 10<sup>th</sup> 2021 (apartments + office) site plans prepared by KTG Architecture & Planning (see Figures 13A, 13B and 14). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: geometric design, traffic volume, and operations. On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

### Project Driveways

Vehicular access to the project site would be provided via the signalized intersection of N. Capitol Avenue and Penitencia Creek Road. The project site consists of two non-contiguous parcels that sit on either side of Penitencia Creek Road. On the northern 2.12-acre parcel, the project would construct 349 apartment units over a 369-space parking garage. Access to the two-level parking garage, one at-grade level and one below-grade level, would be provided via a 22.5-foot-wide entrance on Penitencia Creek Road. A 10-foot-wide entrance, situated 5.5 feet west of the main project entrance, would provide truck access to a trash room. The project is proposing a single 38-foot-wide curb cut (dustpan style driveway) to serve both the residential parking garage and trash room entrances. An additional driveway, located 53 feet west of the trash room entrance, measures 15 feet wide and would serve the on-site loading space. The City of San Jose requires that residential driveways with an attached sidewalk be no more than 26 feet wide. Accordingly, the proposed 38-foot-wide shared driveway is non-standard. The project should provide two dedicated driveways with at least 4 feet of separation between the driveways.

**Recommendation:** Provide two dedicated driveways to serve the garage and trash room separately with at least 4 feet separating the driveways to meet the City's design standards for driveways with an attached sidewalk (i.e., City Standard Detail R-6).

On the southern 1.35-acre parcel, the project would construct up to 32 townhomes, each with a two-car garage. Access to the two-car garages would be provided via two separate 20-foot-wide driveways on Penitencia Creek Road. Access to a small 3-space guest parking lot would be provided via a 24-foot-wide driveway on Kestral Way.

According to the City of San Jose Department of Public Works, the project driveway on Kestral Way should be 26 feet wide per City Standard Detail R-5. Thus, while the project driveways on Penitencia Creek Road would meet the City's design standards for a driveway with an attached sidewalk, the project driveway on Kestral Way (with a detached sidewalk) should be widened from 24 feet to 26 feet and shown as a standard dustpan style driveway on the site plan.

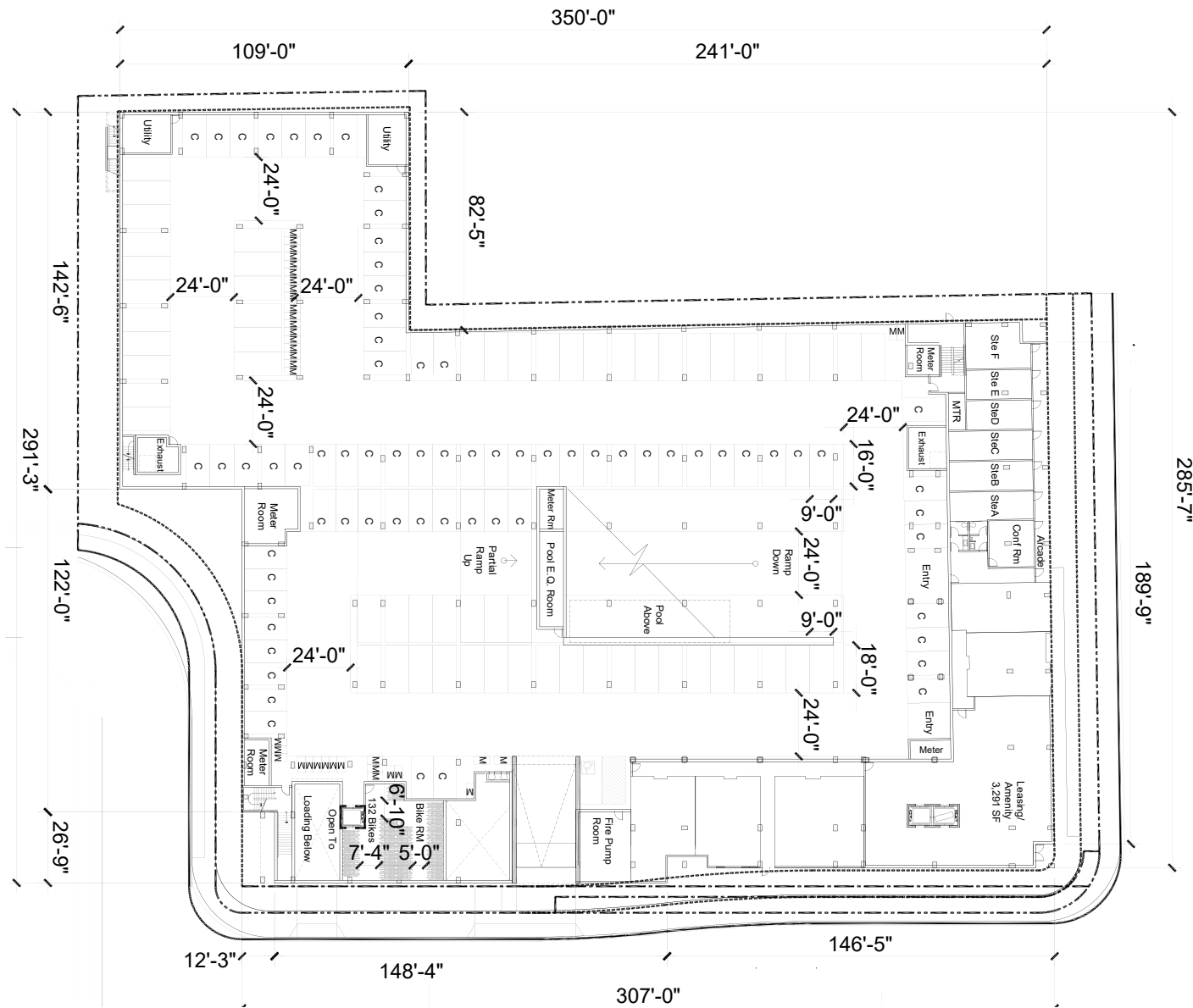
**Recommendation:** Widen the project driveway on Kestral Way from 24 feet wide to 26 feet wide to meet the City's design standards for driveways with a detached sidewalk (i.e., City Standard Detail R-5).

### Trips at the Project Driveways

The project-generated trips that are estimated to occur at the two driveways serving the townhomes are 3 inbound trips and 8 outbound trips during the AM peak hour, and 8 inbound trips and 4 outbound trips during the PM peak hour. The project-generated trips that are estimated to occur at the driveway serving the parking garage for the apartments are 31 inbound trips and 78 outbound trips during the AM peak hour, and 80 inbound trips and 54 outbound trips during the PM peak hour. Thus, approximately one vehicle would enter the parking garage every 45 seconds during the PM peak hour.

Due to the relatively low number of project-generated trips at the project driveways and the very low traffic volumes on Penitencia Creek Road on the west side of N. Capitol Avenue, operational issues related to vehicle queuing and/or delay are not expected to occur at the project driveways.

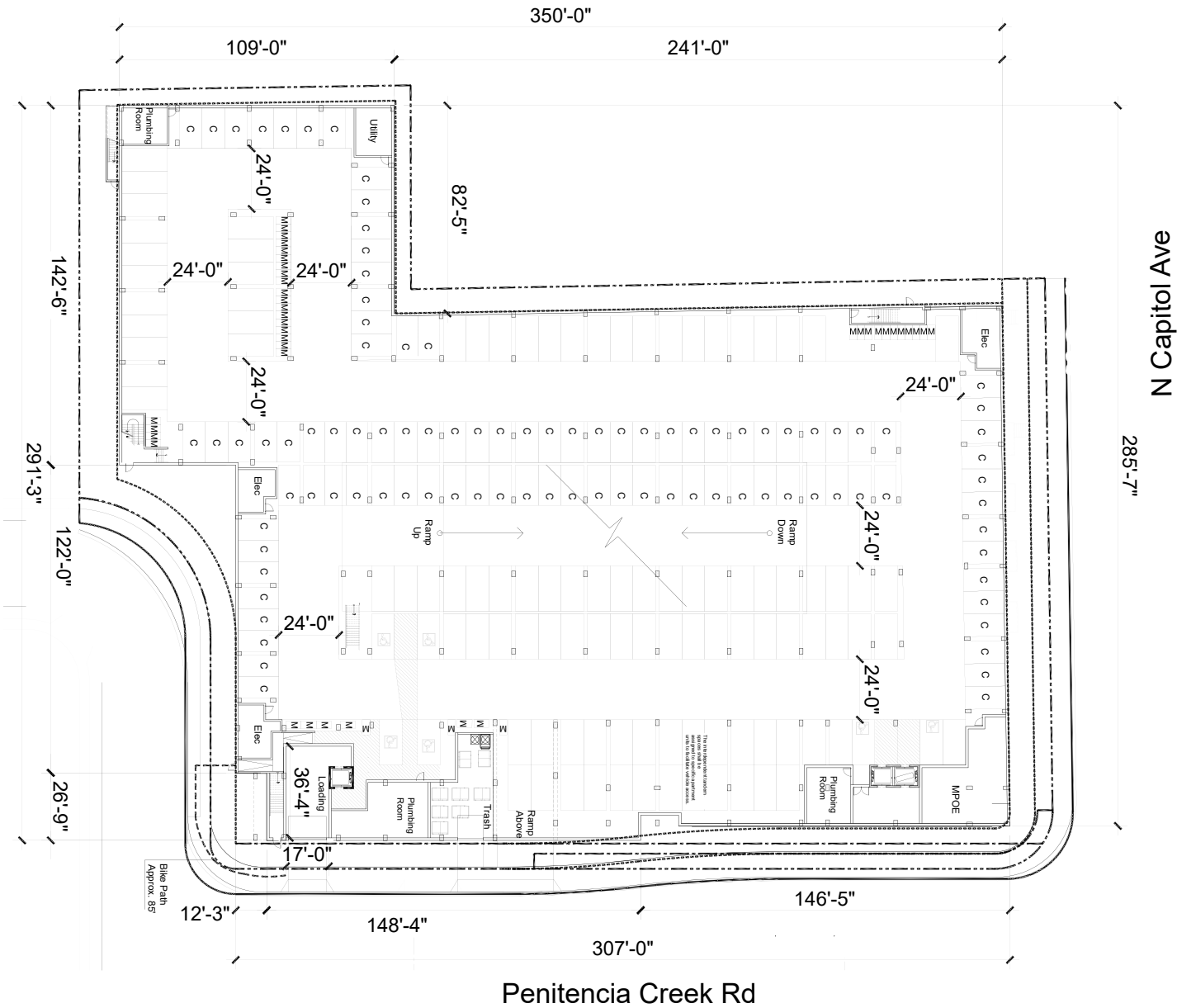




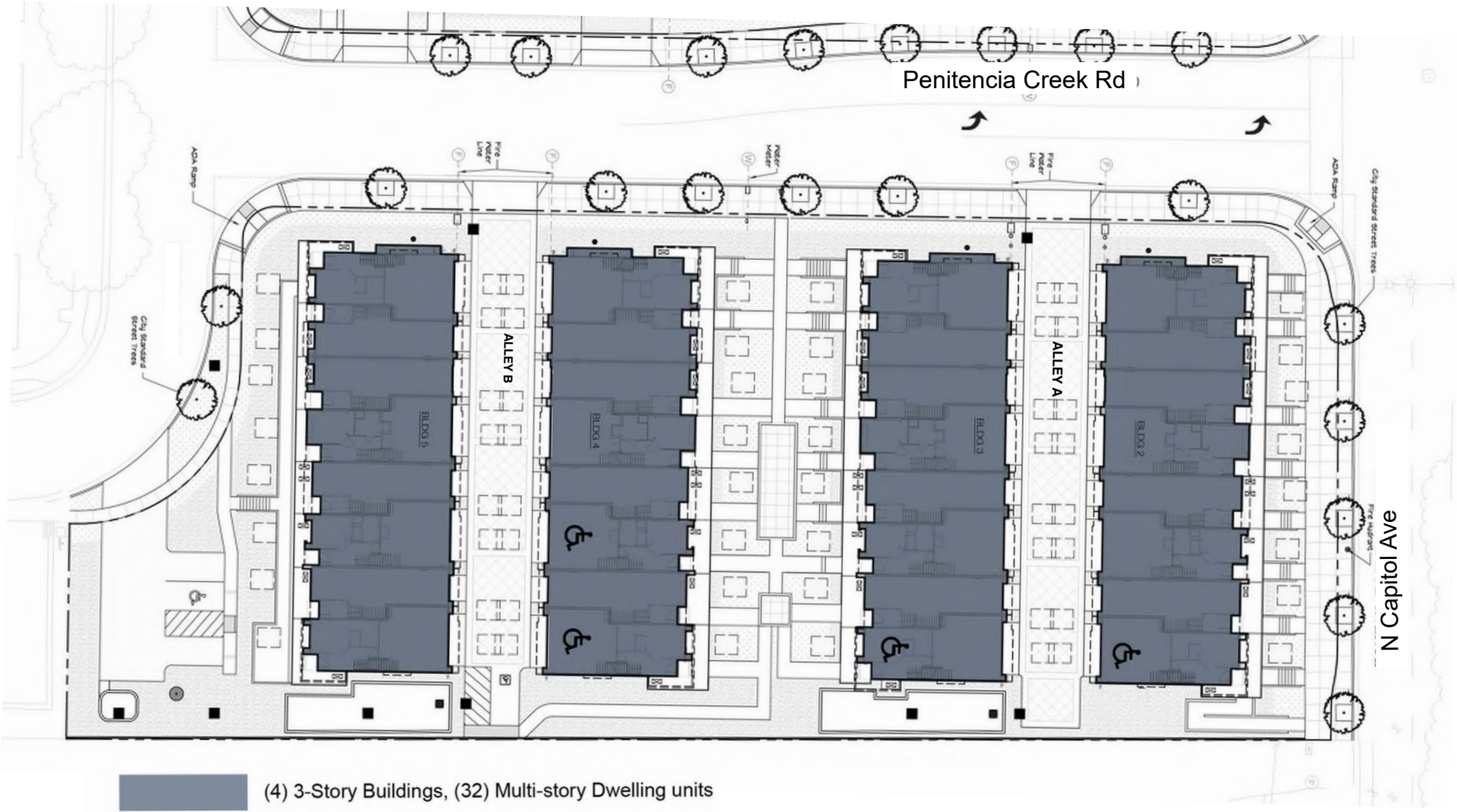
N Capitol Ave

Penitencia Creek Rd

Figure 13A  
Apartments Site Plan - Ground Level



**Figure 13B**  
**Apartments Site Plan - Basement Level**



**Figure 14**  
**Townhomes Site Plan**

### **Inbound Vehicle Storage at the Apartments Parking Garage Driveway**

The City typically requires developments to provide adequate on-site stacking space for two inbound vehicles (approximately 50 feet) between the sidewalk and any entry gates, on-site drive aisles or parking spaces. This prevents vehicles from queuing onto the sidewalk or the street. Fifty feet of vehicle stacking space is currently shown on the site plan between the sidewalk along Penitencia Creek Road and the first drive aisle within the parking garage. However, a security gate would be provided at the entrance to the parking garage approximately 7 feet from the sidewalk. In order to provide adequate inbound stacking space, the security gate should remain open during the period of the day when most inbound vehicle trips are likely to occur, which generally is between the hours of 3:00 PM and 7:00 PM.

**Recommendation:** Keep the garage security gate open during the time period of the day when most inbound vehicle trips are likely to occur (generally from 3:00 PM to 7:00 PM).

### **Sight Distance at the Project Driveways**

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 Penitencia Creek Road. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the driveways. Providing adequate sight distance reduces the likelihood of a collision at a driveway and provides drivers with the ability to exit a driveway or locate sufficient gaps in traffic.

The project is proposing to remove 1 street tree and add 8 street trees along the north side of Penitencia Creek Road (apartments frontage) and replace 6 street trees with 6 new street trees along the south side of Penitencia Creek Road (townhomes frontage). Street trees have a high canopy and would not obstruct the view of drivers exiting the project driveways. Also, parking is not allowed along the project frontages on Penitencia Creek Road. Therefore, adequate sight distance would be provided at the project driveways.

### **On-Site Vehicular Circulation and Parking Garage Layout**

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines. The City's standard minimum width for two-way drive aisles is 26 feet wide where 90-degree parking is provided (*San Jose Municipal Code 20.90.100*). This allows sufficient room for vehicles to back out of parking stalls. According to the site plan, all the drive aisles within the parking garage are shown to be 24 feet wide, and 90-degree parking stalls would be provided on both levels of the garage. 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 and typically provide adequate room to allow vehicles to maneuver in and out of parking spaces. The project applicant should confirm with City of San Jose Public Works staff that the proposed 24-foot internal drive aisle widths would be adequate to serve the apartments.

**Recommendation:** Confirm with City of San Jose Public Works staff that the proposed 24-foot-wide drive aisles within the parking garage would be adequate to serve the apartments.

### **Parking Garage Circulation**

Residents of the apartments would access the ground level of the parking garage via a 24-foot-wide driveway accessed from Penitencia Creek Road. The basement parking level would be accessed via a centrally located internal ramp. There would be no dead-end drive aisles on either parking level.

The internal 24 feet wide drive aisles and garage ramp were evaluated for vehicle access by the method of turning-movement templates. Analysis using the Passenger Car turning templates shows

that small and large passenger vehicles (turning templates “Pm” and “P”, respectively) could adequately negotiate the site and access the ramp. Convex mirrors should be located at the top and bottom of the ramp and all blind corners of the parking garage to eliminate blind spots.

**Recommendation:** Install convex mirrors at the top and bottom of the ramp and at blind turns within the parking garage.

### **Garage Ramp Slope**

Typical engineering design standards require garage ramps without parking to have no greater than a 20 percent grade with transition grades of half the maximum grade (10 percent or less), and garage ramps with parking may have grades of no greater than 5 percent. As proposed, the garage ramp would contain parking and would have a constant slope. Although the site plan does not indicate the slope of the ramp, based on the length of the ramp it appears to meet the 5 percent grade design standard. Hexagon recommends showing the ramp grade on the site plan to show conformance with these engineering design standards.

**Recommendation:** Provide a garage ramp slope of no greater than 5 percent grade to meet the recommended engineering design standards for ramps containing parking.

### **Parking Stall Dimensions**

The City’s off-street parking design standard for 90-degree full-size parking stalls is 9 feet wide by 18 feet long. The City’s off-street parking design standard for 90-degree compact parking stalls is 8 feet wide by 16 feet long.

All the standard full-size parking stalls and tandem stalls shown on the site plan measure 9 feet wide by 18 feet long, which meets the City’s design standard for full-size parking stalls. The compact stalls (which make up 50 percent of the total vehicle parking supply) measure 9 feet wide by 16 feet long and also meets the City’s design standard. The accessible ADA stalls all measure 9 feet wide by 18 feet long and include access aisles of 5 feet or more for van accessibility. These stall dimensions would meet ADA standards.

## **Truck Access and Circulation**

The project site plans were reviewed for truck access using truck turning-movement templates for a SU-30 truck type, which represents various emergency vehicles, garbage trucks, moving trucks, and delivery trucks.

### **Townhome Development**

Based on the townhomes site plan configuration, adequate access would be provided for SU-30 type trucks, such as moving trucks and emergency vehicles, to access the townhome development via both project driveways/alleys. It is assumed that garbage collection would also occur along both alleys. Since the trash bins would be located outside the residential buildings, adequate vertical clearance would be provided to empty garbage bins over the typical side loading trucks.

### **Apartment Development**

The apartments site plan shows one off-street freight loading space with access provided via Penitencia Creek Road. The loading space would be conveniently located adjacent to an elevator and a stairwell for residential move-in/out. The loading space, which measures 15 feet wide by 36 feet 4 inches long, would be served by a 15-foot-wide driveway (measured at the throat). The amount of vertical clearance is not shown on the site plan. According to the City of San Jose Zoning Regulations, off-street loading spaces must be no less than 10 feet wide by 30 feet long by 15 feet high, exclusive of



driveways for ingress and egress and maneuvering areas. Note that the addition of the loading space driveway would require removal of two on-street parking spaces.

**Recommendation:** Provide at least 15 feet of vertical clearance at the entrance to the off-street loading space to meet the City’s design requirement for loading space dimensions.

The on-site loading space provided for the apartments was reviewed for truck access using the truck turning template for SU-30 type trucks. As shown on Figures 15 and 16, the 15-foot-wide driveway serving the loading space would provide adequate ingress and egress for trucks.

### **Garbage Collection**

The site plan shows a trash room located on the basement level with direct access provided via a driveway on Penitencia Creek Road. Garbage trucks typically require 14 to 15 feet of overhead clearance to enter a structure. However, they require approximately 24 feet of overhead clearance to empty a dumpster over the truck and about 20 feet for side loading trucks. Since rear end loading garbage trucks require less vertical clearance than the height of the truck itself, it is the most appropriate type of truck for on-site garbage collection.

### **Emergency Vehicle Access**

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. The project would meet these emergency vehicle access (EVA) requirements.

### **Construction Activities**

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian 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 and parking, and the planned truck routes.

### **Pedestrian, Bicycle, and Transit Facilities**

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals and policies 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.

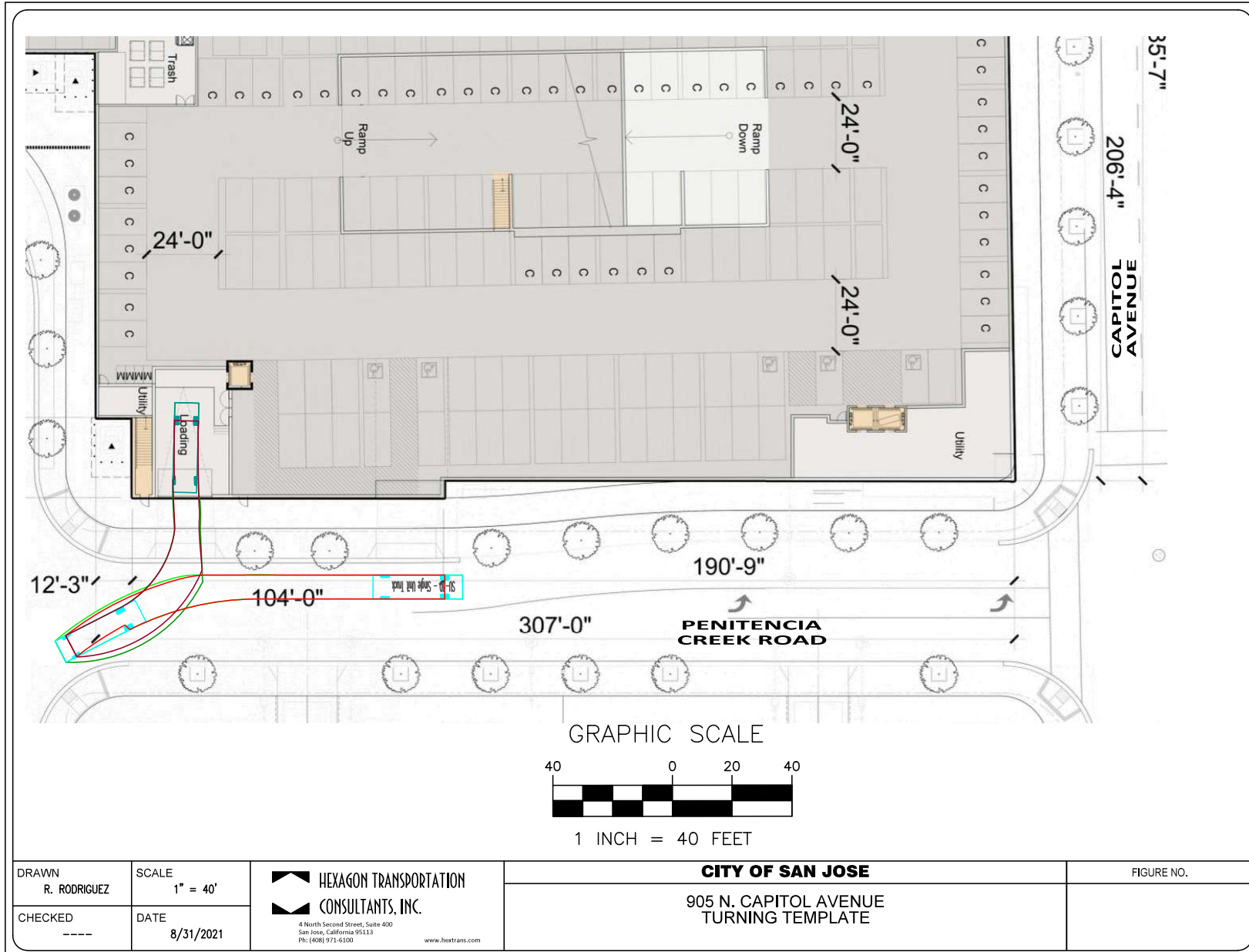


Figure 15  
Truck Turning Template for SU-30 Trucks - Inbound Path

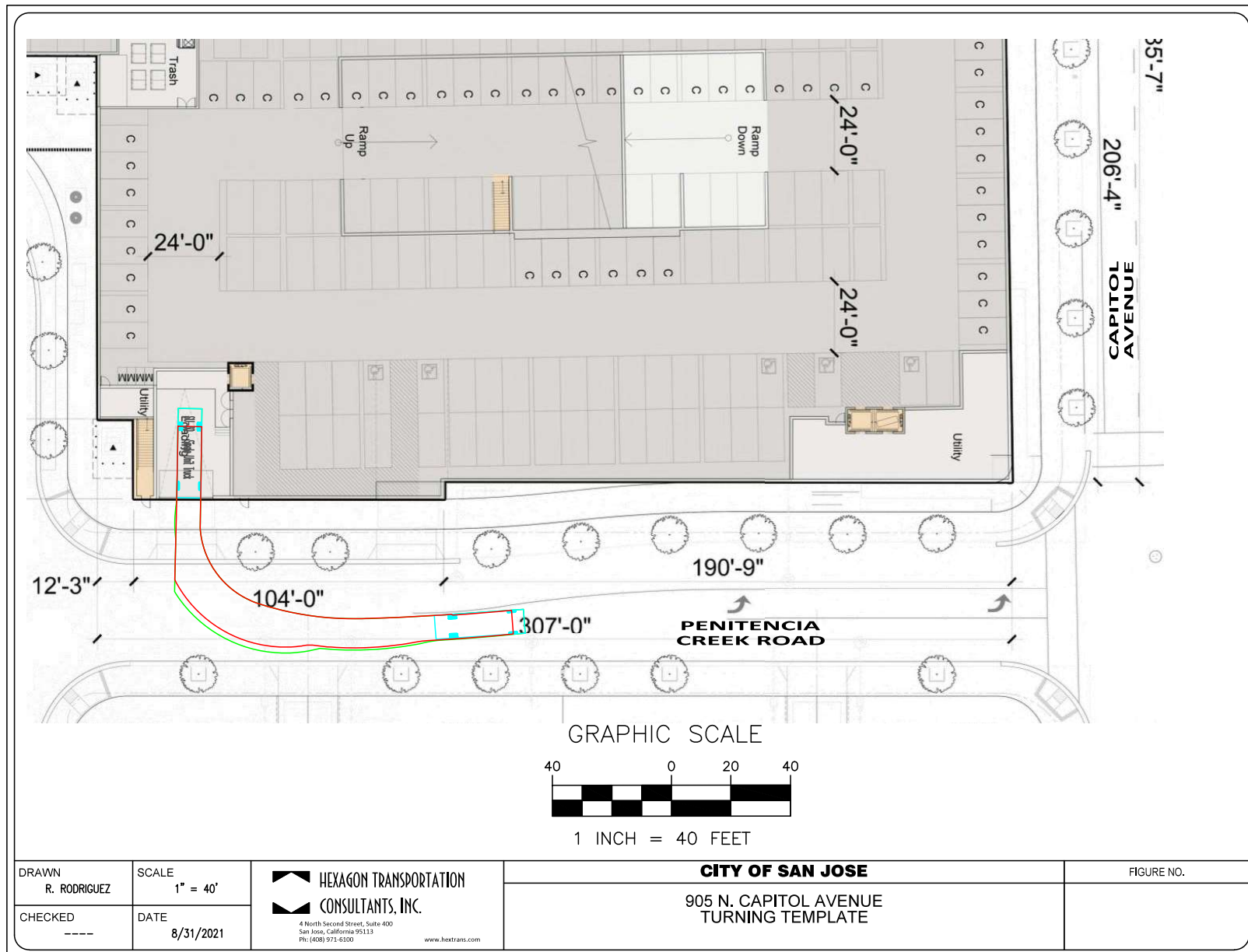


Figure 16  
Truck Turning Template for SU-30 Trucks - Outbound Path

## **Pedestrian and Bicycle Facilities**

The site plan indicates that the existing sidewalks and curbs on N. Capitol Avenue, Penitencia Creek Road and Kestral Way would be reconstructed along the entire project frontages. The site plan shows a 15-foot attached sidewalk with tree wells on N. Capitol Avenue and a 10-foot attached sidewalk with tree wells on Penitencia Creek Road. The new sidewalk on Kestral Way would be 5 feet wide, consistent with the existing sidewalk on Kestral Way. New standard ADA compliant curb ramps with truncated domes would be added to the northwest and southwest corners of the N. Capitol Avenue/ Penitencia Creek Road intersection and to the northeast and southeast corners of the Kestral Way/ Penitencia Creek Road intersection (all four project corners). Truncated domes are the standard design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

The reconstructed sidewalks would provide pedestrian access to multiple residential entrances around the site, as well as to the amenity space, leasing office, and secure bike room. The bike room would accommodate 132 bicycles. Providing adequate and accessible bike parking would help create a bicycle-friendly environment and encourage bicycling by residents of the project.

### **Additional Project Improvements**

N. Capitol Avenue is designated a Class IV protected bike facility per the City of San Jose Better Bike Plan 2025. Class IV protected bicycle facility improvements along both sides of N. Capitol Avenue are planned between Penitencia Creek Road and Gilchrist Road. The bicycle facility improvements would help connect the eastern and western ends of the Penitencia Creek Trail network. As part of the project mitigation, the project would construct the bike access improvements along N. Capitol Avenue.

The project plans to construct a new crosswalk on the south leg of the N. Capitol Avenue/Penitencia Creek Road intersection, including pedestrian signal heads with push buttons and new ADA compliant curb ramps. This improvement would provide a safe connection between the eastern and western ends of the Penitencia Creek Trail. In addition, the project would install all-way stop control and crosswalks (including signage and striping) at the Penitencia Creek Road/Kestral Way intersection.

The pedestrian and bicycle facilities that would be provided as part of the project would tie into the existing pedestrian and bicycle facilities and help encourage walking and biking. The City's General Plan identifies both walk and bicycle commute mode split targets of 15 percent or more for the year 2040. This level of pedestrian and bicycle mode share is a reasonable goal for the project, particularly if nearby transit (e.g., LRT service) is utilized in combination with bicycle commuting.

### **Pedestrian and Bicycle Access to Schools**

Merryhill Elementary School is located on N. Capitol Avenue approximately ½ mile southeast of the project site. Summerdale Elementary School is located just over ½ mile northeast of the project site on Summerdale Drive. Cherrywood Elementary School is located on Greengate Drive approximately 1 mile north of the project site.

Safe and direct pedestrian and bicycle access to all three schools is provided via a continuous network of sidewalks and striped bike lanes along the streets in the surrounding area. Crosswalks with pedestrian signal heads are provided at all signalized intersections along the school routes. Crosswalks are also provided at the unsignalized intersections near the schools. Wheelchair ramps are provided at all corners of the intersections, though some do not meet the current ADA design standards.

The project should consider working with these nearby schools to implement a Safe Routes to Schools program, or participate in a program if one already exists, since 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 and sidewalks.

### **Transit Services**

The Penitencia Creek LRT Station, located a short walk (about 500 feet) from the project site, is served by frequent LRT trains and VTA express bus route 104. Due to the convenient location of the LRT Station, it is reasonable to assume that some residents would utilize the transit services provided. The City's General Plan identifies a transit commute mode split target of 20 percent or more for the year 2040. This level of transit ridership is a reasonable goal for a high-density residential project such as this that is located within walking distance of an LRT station. It is estimated that the increased transit demand generated by the proposed project could be accommodated by the current available ridership capacities of the transit services in the study area.

## **Parking**

### **Townhomes Vehicular Parking**

The City of San Jose's off-street vehicle parking requirement as described in the City's Zoning Code (Chapter 20.90, Table 20-210) for 3-bedroom multiple dwellings is 2.6 covered spaces per unit. Therefore, prior to applying any applicable reductions, the 32-unit townhome portion of the project requires 83 parking spaces. Since the project site is located within 2,000 feet of an existing rail station (Penitencia Creek LRT Station), the project qualifies for a 20 percent parking reduction in the City's standard parking requirement. After applying the reduction, the townhomes would require 67 parking spaces.

The project is proposing to provide 2 garage spaces for each townhome. This equates to 64 parking spaces. In addition, the project would provide a small parking lot with 3 parking spaces, for a total of 67 parking spaces. Thus, the townhome component of the project would meet the City's off-street parking requirement.

### **Apartments Vehicular Parking**

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 and 1.7 parking spaces for two-bedroom units. Based on the City's off-street parking requirement and prior to applying any relevant parking reductions, the 349-unit apartment development would be required to provide a total of 492 vehicle parking spaces calculated as follows:

- 35 studio units x 1.25 spaces = 44 parking spaces
- 193 one-bedroom units x 1.25 spaces = 242 parking spaces
- 121 two-bedroom units x 1.7 spaces = 206 parking spaces

After applying a 20 percent parking reduction for the site's proximity to a rail station, the apartments would require 394 vehicle parking spaces. However, the tandem parking spaces still need to be accounted for in the parking calculation. Tandem parking is described below.



### **Apartment Tandem Parking**

The site plan shows that 12 tandem parking spaces (room for 24 cars) are being proposed on the basement level of the parking garage. In order to guarantee effective utilization of the tandem parking spaces, the project must assign all the tandem parking spaces to individual two-bedroom residential units. The tandem spaces would not be expected to create any parking related issues so long as they are assigned accordingly. In the City of San Jose, the Planning Director may issue a development permit to allow tandem parking spaces to satisfy up to 50 percent of the off-street parking requirement for a project. This project proposes far less than the maximum allowable amount of tandem parking.

If the 24 tandem parking spaces are assigned to 12 individual two-bedroom units, that leaves 109 two-bedroom units not assigned tandem parking with a parking requirement of 186 spaces (109 units x 1.7 spaces per unit = 185.3 = 186 spaces rounded up). By assigning the tandem spaces to individual two-bedroom units, the project would be providing 2.0 parking spaces per unit to 12 of the 121 two-bedroom units, regardless of the allowable 20 percent parking reduction that would normally apply due to the project site's proximity to transit. The adjusted parking requirement for the apartments, including the 20 percent reduction for proximity to transit, is calculated below:

- 35 studio units x 1.25 spaces per unit = 43.75 x 0.80 = 35 spaces required
- 193 one-bedroom units x 1.25 spaces per unit = 241.25 x 0.80 = 193 spaces required
- 109 two-bedroom units x 1.7 spaces per unit = 185.3 x 0.80 = 149 spaces required
- 12 two-bedroom units x 2.0 tandem spaces per unit = 24 spaces required

Accounting for the usage of tandem parking spaces, 401 parking spaces would be required to serve the apartments.

**Recommendation:** Assign all tandem parking spaces to individual two-bedroom apartment units.

### **Proposed Apartments Vehicle Parking Supply**

The project is proposing to provide a total of 369 parking spaces to serve the apartments. Thus, based on the City's vehicle parking requirement, the apartment component of the project would have a parking deficit of 32 spaces: 401 required - 369 provided = 32-space deficit.

In order to address the parking deficit of 8 percent, the project plans to implement a Transportation Demand Management (TDM) Plan. The comprehensive TDM Plan will include various parking reduction strategies and is described in Chapter 5.

### **Apartments Motorcycle and Bicycle Parking**

The City requires one motorcycle parking space for every four residential units (per Chapter 20.90, Table 20-250 of the City's Zoning Code). This equates to 88 motorcycle spaces needed to serve the apartments. Applying a 20 percent reduction equates to a total parking requirement of 71 motorcycle spaces. The project is proposing to provide 89 motorcycle parking spaces, which exceeds the City's motorcycle parking requirement.

The City requires one bicycle parking space for every four residential units (per Chapter 20.90, Table 20-210 of the City's Zoning Code). This equates to 88 bicycle parking spaces needed to serve the apartments. According to the site plan, the project is proposing to provide 132 bicycle parking spaces, which exceeds the City's bicycle parking requirement. The site plan shows all the bicycle parking would be provided in a secure bike room on the ground level of the parking garage.

### **Office Parking**

The project would not provide separate parking for the 3,000 s.f. of ground floor office space.

## 5. Transportation Demand Management Plan

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This chapter describes the Transportation Demand Management (TDM) plan for the project to promote sustainable modes of transportation and reduce parking demand. The TDM measures recommended for the apartment component of the project were developed based on the City of San Jose Zoning Code and TDM strategies identified in the City of San Jose's *Transportation Analysis Handbook*, April 2020, and are geared toward reducing the project's parking demand to allow for a reduction in parking supply. Some of the TDM measures identified in this chapter will also serve as CEQA VMT mitigation (as described in Chapter 3).

As described in Chapter 4, an 8 percent reduction in parking is proposed for the apartment component of the project. To qualify for a reduction in the required vehicle parking spaces, the project is required to implement a TDM plan to reduce parking demand and satisfy the parking reduction requirements as specified in Section 20.90.220 of the City's Zoning Code. The City of San Jose Planning Director may reduce the required number of parking spaces for a project by up to 50 percent, so long as (1) the reduction in parking will not adversely affect surrounding projects; (2) the reduction in parking will not rely upon or reduce the public parking supply; and (3) the project provides a detailed TDM plan and demonstrates that the TDM plan can be maintained indefinitely.

The TDM plan describes the recommended TDM measures and implementation and monitoring of the TDM plan. Implementation of the recommended TDM measures would help to reduce the project's parking demand. Monitoring will ensure that the TDM measures are effective and continue to be successfully implemented.

### City of San Jose Parking Code

According to Section 20.90.220.A.1, a reduction in the required off-street vehicle parking spaces of up to 50 percent may be authorized if the project site is located within 2,000 feet of an existing rail station as specified in Subsection a, conforms to the bicycle parking requirements specified in Subsection b, and implements at least three TDM measures specified in Subsections c and d. Section 20.90.220.A.1 of the San Jose Parking Code is outlined below.

#### Section 20.90.220 – Reduction in Required Off-street Parking Spaces

##### A. *Alternative transportation.*

1. *A reduction in the required off-street vehicle parking spaces of up to fifty percent may be authorized with a development permit or a development exception if no development permit is required, for structures or uses that conform to all the following and implement a total of at least three transportation demand management (TDM) measures as specified in the following provisions:*

- a. *The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a Neighborhood Business District, or as an Urban Village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220G.; and*
- b. *The structure or use provides bicycle parking spaces in conformance with the requirements of Table 20-90.*
- c. *For any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand management (TDM) program that contains but is not limited to at least one of the following measures:*
  - i. *Implement a carpool/vanpool or car-share program, e.g., carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign carpool, van pool and car-share parking at the most desirable onsite locations at the ratio set forth in the development permit or development exception considering type of use; or*
  - ii. *Develop a transit use incentive program for employees and tenants, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the region-wide Clipper Card or VTA EcoPass system will satisfy this requirement).*
- d. *In addition to the requirements above in Section 20.90.220.A.1.c. for any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand management (TDM) program that contains but is not limited to at least two of the following measures:*
  - i. *Implement a carpool/vanpool or car-share program, e.g., carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign carpool, van pool and car-share parking at the most desirable on-site locations; or*
  - ii. *Develop a transit use incentive program for employees, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the regionwide Clipper Card or VTA EcoPass system will satisfy this requirement); or*
  - iii. *Provide preferential parking with charging facility for electric or alternatively-fueled vehicles; or*
  - iv. *Provide a guaranteed ride home program; or*
  - v. *Implement telecommuting and flexible work schedules; or*
  - vi. *Implement parking cash-out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking); or*
  - vii. *Implement public information elements such as designation of an on-site TDM manager and education of employees regarding alternative transportation options; or*
  - viii. *Make available transportation during the day for emergency use by employees who commute on alternate transportation. (This service may be provided by access to company vehicles for private errands during the workday and/or combined with contractual or pre-paid use of taxicabs, shuttles, or other privately provided transportation); or*
  - ix. *Provide shuttle access to Caltrain stations; or*
  - x. *Provide or contract for on-site or nearby child-care services; or*
  - xi. *Incorporate on-site support services (food service, ATM, drycleaner, gymnasium, etc. where permitted in zoning districts); or*
  - xii. *Provide on-site showers and lockers; or*
  - xiii. *Provide a bicycle-share program or free use of bicycles on-site that is available to all tenants of the site; or*
  - xiv. *Unbundled parking; and*

- e. *For any project that requires a TDM program:*
- i. *The decision maker for the project application shall first find in addition to other required findings that the project applicant has demonstrated that it can maintain the TDM program for the life of the project, and it is reasonably certain that the parking shall continue to be provided and maintained at the same location for the services of the building or use for which such parking is required, during the life of the building or use; and*
  - ii. *The decision maker for the project application also shall first find that the project applicant will provide replacement parking either on-site or off-site within reasonable walking distance for the parking required if the project fails to maintain a TDM program.*

## Compliance with the City Parking Code

### Project Location

The project site is located within 2,000 feet of an existing rail station (Penitencia Creek LRT Station). Thus, the project would be in conformance with Subsection 20.90.220.A.1.a of the City's Parking Code.

### Bicycle Parking Requirement

As previously mentioned in Chapter 4, in accordance with the City's Parking Code (Chapter 20.90, Table 20-210), the project is required to provide a minimum of 88 bicycle parking spaces to serve the apartments. The project is proposing to provide 132 bicycle parking spaces on the ground parking level. Therefore, the project would provide adequate bicycle parking to serve the apartments and would be in conformance with Subsection 20.90.220.A.1.b of the City's Parking Code.

### Vehicle Parking Requirement

Based on the City's off-street vehicle parking requirements as described in the Zoning Code (Chapter 20.90, Table 20-210), and accounting for the 24 tandem parking spaces that are proposed, a total of 401 vehicle parking spaces are required to serve the apartments. The project proposes 369 vehicle parking spaces to serve the apartments, which amount to an approximately 8 percent reduction in parking (after applying the allowable 20 percent reduction). To qualify for an additional 8 percent reduction in the required vehicle parking spaces, the project is proposing to implement various parking reduction and parking management strategies as part of a robust TDM plan.

## Proposed TDM Measures

### 1. Bicycle Facilities and Resources

Providing secure bicycle parking encourages bicycle commuting and increases the parking supply available to residents. The on-site management will provide a secure bicycle storage room on the ground level of the parking garage that will accommodate 132 bicycles.

As part of the information available in the "online kiosk" discussed in more detail below, resources useful to cyclists will be included. For example, the local bikeways map will be posted for easy reference.

The following resources are available to bicycle commuters through 511.org. These resources will be noted on the project's online information center, in order to make tenants aware of them.

- Free Bike Buddy-matching

- Bicycle maps
- Bicycle safety tips
- Information about taking bikes on public transit
- Location and use of bike parking at transit stations
- Information on Bike to Work Day
- Tips on selecting a bike, commute gear, and clothing
- Links to bicycle organizations

## **2. On-Site Car Share Program**

The on-site management will provide subsidized memberships to a car sharing program (e.g., Zipcar, City Carshare) for future residents of the apartments upon request. Dedicated car share parking will also be provided in a preferential on-site location. Car sharing services are a low-cost alternative to car ownership and provide flexibility to those who use other transportation modes for their daily commute but may need to access a car for mid-day errands. Car sharing helps support the use of walking, biking, carpooling, and transit by providing another means for business/day trips or a guaranteed ride home option, allowing for overall reductions in automobile use which results in reduced VMT. Thus, this TDM measure also serves as CEQA VMT mitigation as described in Chapter 3.

## **3. Voluntary Travel Behavior Change Program**

The project will provide a program that targets individual attitudes and behaviors towards travel and provides information and tools for residents to analyze and alter their travel behavior. Voluntary Travel Behavior Change programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from alternative modes of travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing drive-alone vehicle trips and VMT. Utilizing alternative modes of transportation reduces parking demand. All residents/households will be provided with the information/tools necessary to fully participate in the Voluntary Travel Behavior Change program. This TDM measure serves as CEQA VMT mitigation as described in Chapter 3.

## **4. On-Site TDM Coordinator and Services**

Experience with other TDM programs indicates that having a transportation coordinator who focuses on transportation issues and is responsible for implementing the TDM program is key to its success. The apartment building owner or management would need to appoint an individual as the Transportation Coordinator or TDM contact person, and that person's name and contact information would be provided to the City.

The on-site management will provide an on-site TDM coordinator, most likely the property manager, who would be responsible for implementing and managing the TDM plan. The TDM coordinator would be a point of contact for residents should TDM-related questions arise and would be responsible for ensuring that tenants are aware of all transportation options and how to fully utilize the TDM plan. The TDM coordinator would provide the following services and functions to ensure the TDM plan runs smoothly:

- Provide new tenant information packets at the time of move-in. The welcome packets would include information about public transit services, bicycle maps, bike share program and station locations, Zipcar station locations, and ride-matching services.
- Set up and maintain an on-site information board and/or the online kiosk with information of non-auto transportation alternatives.



- Provide trip planning assistance and/or ride-matching assistance to residents who are considering an alternative mode of transportation.
- Conduct parking surveys annually to track actual parking demand and determine whether additional TDM measures, or another parking solution, is needed.

The Transportation Coordinator should maintain a supply of up-to-date transit schedules and route maps for VTA bus and LRT services and be knowledgeable enough to answer residents' TDM program related questions.

### **Information Board/Online Kiosk**

The transportation coordinator would set up and maintain an on-site bulletin board and/or online kiosk with information regarding non-auto transportation alternatives. The transportation board would update key transportation information included in the welcome packets. Additionally, transportation news and commuter alerts would be posted on the board. This TDM Plan proposes to establish an online kiosk that a resident could access from their home, their desk at work, or anywhere else. The developer would implement this measure as part of an Active Building site or an equivalent virtual site, which is a community webpage used to connect residents, distribute information, and manage property. TDM related links and information would be posted on this forum, and the Transportation Coordinator would have host permissions to send residents email notifications pertaining to the TDM Plan and measures. The online kiosk would include information about all the measures, services, and facilities discussed in this plan, including:

- A summary of VTA services and links to further information about their routes and schedules.
- Bicycling resources on 511.org.
- A local bikeways map and information about the bike lockers on site and those nearby.
- Information about ride-matching services (511.org, Zimride, and TwoGo) and the available car-share program (Zipcar).
- A link to the many other trip planning resources available in the Bay Area such as Dadnab, the 511 Transit Trip Planner, real-time traffic conditions, etc.

The building developer would have responsibility for creating the webpage so that it is up and running as soon as residents move in. More specific information can be added later to reflect any programs specific to certain residents of the apartments. The Transportation Coordinator would be responsible for adding new information to the website (or providing it to the website designer) so that the online kiosk remains current and informative.

### **Transportation Information Packet**

In addition to the online information center, the transportation coordinator would provide "hard copy" transportation information packets to all new residents upon move-in. Because all information would be available online, the welcome packets need not be a comprehensive stack of paper about all services available, which residents tend to disregard anyway. Instead, the New Resident Packet would provide a quick easy-to-read announcement of the most important features of the TDM program for residents to know about immediately. The packet would also include information regarding how to contact the transportation coordinator. New residents would also be advised to gather information regarding non-auto transportation alternatives from the on-site information board and/or online transportation kiosk.

In addition, the packets would include a message to residents that their building manager and/or owner values alternative modes of transportation and takes their commitment to supporting alternative transportation options seriously. For example, it would include a flyer announcing the "online kiosk", information about the Car Share program and station locations, and a ride-matching application.

## 5. Preferential Parking and Charging for Electric Vehicles

The on-site management (or any future building owner) would provide preferential parking spaces for all-electric vehicles or plug-in hybrids, but not hybrid vehicles that do not have a charger. If demand for preferential parking for electric vehicles exceeds the initial designated spaces, the building would designate additional spaces as demand warrants. The on-site management would work with the City to determine the initial number of charging stations to be installed at the site. Preferential parking spaces provide a prominent visual message to residents that alternative transportation is valued.

## 6. Trip Planning Resources

There are several free trip planning resources that tenants may not be aware of. Information on these services should be included in the welcome packets for new tenants. These include:

### **511 Transit Trip Planner**

Online transit trip planning services are available to the greater San Francisco Bay Area through 511.org. Users enter their starting and ending points, and either the desired starting or ending trip time. The service can build an itinerary that best suits the user's preferences for the fastest trip, fewest transfers, or least walking.

### **511 Mobile**

Many popular features from 511.org can be accessed using smart phones or mobile devices. With 511 Mobile, commuters can: (1) receive real-time transit departure predictions, (2) plan a public transit trip, (3) check real-time traffic conditions on the live traffic map, and (4) get current driving times for the most popular routes in the Bay Area.

### **511 Carpool Calculator**

The 511 Carpool Calculator is a 511-sponsored online calculator that determines the cost of commuting by driving alone. Users input commute details such as the number of miles traveled to and from work, vehicle mileage, fuel cost, parking costs, and bridge tolls. The tool then calculates solo commuting costs and vehicle CO<sub>2</sub> emissions, as well as the potential savings by adding carpool partners.

### **511 RideMatch**

The 511 RideMatch service provides an interactive, on-demand system that helps commuters find carpools, vanpools or bicycle partners. This free car and vanpool ride matching service helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users are provided with a list of other commuters near their employment or residential ZIP code along with the closest cross street, email, phone number, and hours they are available to commute to and from work. Participants are then able to select and contact others with whom they wish to commute. The service also provides a list of existing carpools and vanpools in their residential area that may have vacancies. Ride matching assistance is also available through a number of peer-to-peer matching programs, such as Zimride, which utilize social networks to match commuters.

### **Private Ride-matching Resources**

There are many free and commercial applications offering carpooling or discounted taxi services. These applications are created by third-party app developers for smart phone users. Carpooling applications include Carma and Slice Rides. Discounted taxi services include Uber, Lyft, and Sidecar Ride.

## Summary of TDM Measures

The specific TDM measures recommended for the project are summarized below and are based on the measures specified in Subsections 20.90.220.A.1.c, d, and e, as well as Subsection 20.70.330.A.1 of the San Jose Code of Ordinances, which are aimed at meeting up to a 50 percent maximum parking reduction that can be granted by the City with implementation of a comprehensive TDM Plan. The proposed TDM Plan includes the following measures:

1. Bicycle Facilities and Resources
2. On-Site Car Share Program
3. Voluntary Travel Behavior Change Program
4. On-Site TDM Coordinator and Services
5. Preferential Parking and Charging for Electric Vehicles
6. Trip Planning Resources

## TDM Plan Implementation and Monitoring

The primary purpose of the TDM plan is to reduce the project parking demand by at least 8 percent. Per Sections 20.70.330 and 20.90.220 of the San Jose Code of Ordinances, monitoring will be necessary to ensure that the TDM measures are effective and continue to be successfully implemented.

### Implementation

The project applicant must submit this TDM Plan to the City of San Jose and would be responsible for ensuring that the TDM measures are incorporated into the project. After the development is constructed and the apartment units are fully occupied, the project applicant needs to identify a TDM coordinator. The TDM coordinator would be responsible for implementing the ongoing TDM measures. If the TDM coordinator changes for any reason, the City and tenants should be notified of the name and contact information of the new designated TDM coordinator.

### Monitoring and Reporting

The TDM Plan would have an annual monitoring and reporting requirement for the life of the project, unless City staff determines otherwise. If it is determined that the additional 8 percent parking reduction is not being achieved, additional TDM measures, or the parking management measure described below, would need to be introduced to ensure that the parking is being addressed by the project without the burden being placed on outside entities.

It is recommended that the designated TDM coordinator consult with City staff to ensure the monitoring and reporting meets the City's expectations. Monitoring should include the following components:

- Annual Vehicle Parking Counts (conducted by a third party)
- Annual Mode Share Survey (delivered to tenants)
- Annual Monitoring Report (provided to City of San Jose staff)

### Annual Vehicle Parking Counts

Annual parking counts should be conducted by a third party on a typical weekday (Tuesday, Wednesday, or Thursday). Counts of the number of parked vehicles and vacant residential spaces should be conducted late at night (after 10:00 PM). The goal of the TDM Plan is to avoid parking spillover. Thus, if the counts show that parking spaces are less than fully occupied (i.e., counts show

one or more vacant spaces), it can be assumed that all parking demand is being accommodated on site, and the TDM Plan is effective. If parking spaces are 100 percent occupied, then spillover is likely occurring and the TDM Plan may need to be enhanced.

### **Annual Mode Share Survey**

The annual survey would provide qualitative data regarding tenant perceptions of the alternative transportation programs and perceptions of the obstacles to using an alternative mode of transportation. The annual survey would also provide quantitative data regarding the number of tenants who utilize alternative modes of transportation (e.g., transit, car-share, bike-to-work, etc.) to commute to work, including the frequency of use. The mode share survey results would measure the relative effectiveness of individual program components and facilitate the design of possible program enhancements.

### **Annual Monitoring Report**

The TDM coordinator should submit annual reports to the City of San Jose for three years, and then upon request of the Zoning Administrator for the life of the project with the following information:

- Findings of the vehicle parking counts and mode share surveys, including the reduction in parking demand.
- Effectiveness of individual program components from the annual mode share survey.
- A description of the TDM programs and services that were offered in the preceding year, with an explanation of any changes or new programs offered or planned.

### **Potential Parking Management Solution**

If all possible TDM measures are implemented and it is determined that the project still fails to meet the parking demand of the apartments with the 369 on-site parking spaces provided, the TDM coordinator shall give rental priority to households that do not own personal vehicles. Should the on-site parking garage reach full capacity, prospective tenants who own personal vehicles shall be required to provide evidence of a secured off-site parking lease agreement valid for the duration of the residential lease.

## 6. Conclusions

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This report presents the results of the transportation analysis conducted for a proposed residential development at 905 N. Capitol Avenue in San Jose, California. The project site consists of two non-contiguous parcels that sit across Penitencia Creek Road from one another. On the larger parcel (2.12 acres), the project would construct 349 apartment units over a 369-space parking garage. The development would also include 3,000 square feet (s.f.) of ground floor office space. A single garage entrance would be provided on Penitencia Creek Road. On the smaller parcel (1.35 acres), the project would construct 32 townhomes, each with a two-car garage.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a Local Transportation Analysis (LTA). The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for three (3) signalized intersections in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit services and bicycle and pedestrian access.

The effects of the project on freeway segments were evaluated in accordance with the methodologies described in the Santa Clara Valley Transportation Authority's (VTA) *Transportation Impact Analysis Guidelines* (2014). The VTA administers the Santa Clara County Congestion Management Program (CMP).

### CEQA Transportation Analysis

The project daily VMT estimated by the City's VMT Evaluation Tool is 10.86 per capita. The project VMT, therefore, exceeds the residential threshold of 10.12 daily VMT per capita

#### Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

#### Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement bike access improvements, pedestrian network improvements, and traffic



calming measures (Tier 2 multimodal infrastructure strategies), as well as provide an on-site car sharing program and a voluntary travel behavior change program (Tier 4 TDM strategies) to mitigate the significant VMT impact. These measures are listed below.

1. **Bike Access Improvements (Tier 2)**
2. **Pedestrian Network Improvements (Tier 2)**
3. **Traffic Calming Measures (Tier 2)**
4. **Car Sharing Program (Tier 4)**
5. **Voluntary Travel Behavior Change Program (Tier 4)**

### **Conclusions of VMT Impact and Mitigation**

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 10.04 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 10.12 VMT per capita).

## **Local Transportation Analysis**

### **Project Trip Generation**

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 1,758 new daily vehicle trips, with 120 new trips occurring during the AM peak hour and 146 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce 34 new inbound and 86 new outbound trips during the AM peak hour, and 88 new inbound and 58 new outbound trips during the PM peak hour.

### **Intersection Traffic Operations**

Based on the City of San Jose intersection operations analysis criteria, none of the study intersections would be adversely affected by the project.

### **Other Transportation Issues**

In general, the proposed site plan shows adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle or transit facilities in the study area. Below are recommendations resulting from the site plan review.

#### **Site Plan Recommendations**

- Provide two dedicated driveways to serve the parking garage and trash room separately with at least 4 feet separating the driveways to meet the City's design standards for driveways with an attached sidewalk (i.e., City Standard Detail R-6).
- Widen the project driveway on Kestral Way from 24 feet wide to 26 feet wide to meet the City's design standards for driveways with a detached sidewalk (i.e., City Standard Detail R-5).
- Keep the garage security gate open during the time period of the day when most inbound vehicle trips are likely to occur (generally from 3:00 PM to 7:00 PM).
- Confirm with City of San Jose Public Works staff that the proposed 24-foot-wide drive aisles within the parking garage would be adequate to serve the apartments.

- Install convex mirrors at the top and bottom of the ramp and at blind turns within the parking garage.
- Provide a garage ramp slope of no greater than 5 percent grade to meet the recommended engineering design standards for ramps containing parking.
- Provide at least 15 feet of vertical clearance at the entrance to the off-street loading space to meet the City's requirement for loading space dimensions.
- Assign all tandem parking spaces to individual two-bedroom apartment units.

## US 101/Oakland/Mabury Transportation Development Policy

Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the US 101/Oakland/Mabury TDP program. The fee for the TDP program is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of January 2021) is \$43,696 per each new PM peak hour vehicle trip that would be added to the interchange.

Based on the site location and project trip distribution patterns, it is estimated that the project would add 7 new PM peak hour vehicle trips to the US 101/Oakland Road interchange. Therefore, the project would be required to pay \$305,872 to help fund the intersection improvements discussed in the US 101/Oakland/Mabury TDP as calculated below.

**US 101/Oakland/Mabury TDP Impact Fee: \$43,696 x 7 PM peak hour trips = \$305,872**

## Transportation Demand Management Plan

After applying the allowable 20 percent parking reduction for the site's proximity to a rail station, the project would have a vehicular parking deficit of 8 percent. In order to address the parking deficit, the project plans to implement a TDM Plan. The proposed TDM Plan includes the following measures:

1. Bicycle Facilities and Resources
2. On-Site Car Share Program
3. Voluntary Travel Behavior Change Program
4. On-Site TDM Coordinator and Services
5. Preferential Parking and Charging for Electric Vehicles
6. Trip Planning Resources

**905 N Capitol Avenue TA**  
**Technical Appendices**

**Appendix A**  
**Volume Summary Tables**

Intersection Number:	1													
Traffic Node Number:	3293													
Intersection Name:	N Capitol Avenue & Berryessa Road													
Peak Hour:	AM													
Count Date:	10/27/15													
Scenario:	32 8 Plex Townhomes + 349 Apartments													
													SJ Growth Factor (% Per Year):	0.01
													Number of Years:	5.75
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (Oct 2015)	438	170	38	38	809	80	104	517	910	229	549	231	4113	
1% Annual Growth (SJ Count Adjustment)	25	10	2	2	47	5	6	30	52	13	32	13	236	
Existing Conditions (July 2021)	463	180	40	40	856	85	110	547	962	242	581	244	4349	
<b>Approved Project Trips</b>														
San Jose ATI	14	7	1	3	25	6	9	16	85	41	18	11	236	
PDC04-017 Trips Removed	0	-2	0	0	0	-2	-4	-4	-48	-26	0	0	-86	
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	14	5	1	3	25	4	5	12	37	15	18	11	150	
Background Conditions	477	185	41	43	881	89	115	559	999	257	599	255	4499	
													Bkgrd check	477 185 41 43 881 89 115 559 999 257 599 255
<b>Project Trips</b>														
8 Plex Townhomes Project Trips	0	1	0	0	0	0	0	2	4	2	0	0	9	
Apartments Project Trips	0	5	0	0	0	0	0	15	42	14	0	0	76	
Office Project Trips	0	1	0	0	0	0	0	0	1	3	0	0	5	
TRAFFIX Rounding Adjust	0	0	0	0	0	0	0	0	0	-1	0	0	-1	
Total Project Trips	0	7	0	0	0	0	0	17	47	18	0	0	89	
Background + Project Conditions	477	192	41	43	881	89	115	576	1046	275	599	255	4588	
													Bkgrd+Proj check	477 192 41 43 881 89 115 576 1046 275 599 255

Intersection Number:	2													
Traffic Node Number:	3388													
Intersection Name:	N Capitol Avenue & Penitencia Creek Road													
Peak Hour:	AM													
Count Date:	04/04/18													
Scenario:	32 8 Plex Townhomes + 349 Apartments													
													SJ Growth Factor (% Per Year):	0.01
													Number of Years:	3.25
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (April 2018)	5	165	121	386	1	29	15	528	0	4	0	22	1276	
1% Annual Growth (SJ Count Adjustment)	0	5	4	13	0	1	0	17	0	0	0	1	41	
Existing Conditions (July 2021)	5	170	125	399	1	30	15	545	0	4	0	23	1317	
<b>Approved Project Trips</b>														
San Jose ATI	31	5	6	3	2	21	4	33	15	28	4	57	209	
PDC04-017 Trips Removed	-31	0	0	0	-2	0	0	0	-15	-28	-4	-57	-137	
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	5	6	3	0	21	4	33	0	0	0	0	72	
Background Conditions	5	175	131	402	1	51	19	578	0	4	0	23	1389	
													Bkgrd check	5 175 131 402 1 51 19 578 0 4 0 23
<b>Project Trips</b>														
8 Plex Townhomes Project Trips	2	0	0	0	0	0	0	0	1	2	0	6	11	
Apartments Project Trips	20	0	0	0	0	0	0	0	7	19	0	58	104	
Office Project Trips	4	0	0	0	0	0	0	0	1	0	0	1	6	
TRAFFIX Rounding Adjust	0	0	0	0	0	0	0	0	0	1	0	0	1	
Total Project Trips	26	0	0	0	0	0	0	0	9	22	0	65	122	
Background + Project Conditions	31	175	131	402	1	51	19	578	9	26	0	88	1511	
													Bkgrd+Proj check	31 175 131 402 1 51 19 578 9 26 0 88

Intersection Number:	3													
Traffic Node Number:	3385													
Intersection Name:	N Capitol Avenue & Mabury Road													
Peak Hour:	AM													
Count Date:	09/25/18													
Scenario:	32 8 Plex Townhomes + 349 Apartments													
													SJ Growth Factor (% Per Year):	0.01
													Number of Years:	2.83
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (September 2018)	284	236	110	207	711	125	47	491	214	88	406	185	3104	
1% Annual Growth (SJ Count Adjustment)	8	7	3	6	20	4	1	14	6	2	12	5	88	
Existing Conditions (July 2021)	292	243	113	213	731	129	48	505	220	90	418	190	3192	
<b>Approved Project Trips</b>														
San Jose ATI	14	36	1	3	10	6	5	39	17	6	6	9	152	
PDC04-017 Trips Removed	-9	-19	0	0	0	0	0	-10	0	0	0	-5	-43	
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	5	17	1	3	10	6	5	29	17	6	6	4	109	
Background Conditions	297	260	114	216	741	135	53	534	237	96	424	194	3301	
													Bkgrd check	297 260 114 216 741 135 53 534 237 96 424 194
<b>Project Trips</b>														
8 Plex Townhomes Project Trips	1	1	0	0	0	0	0	0	0	0	0	0	2	
Apartments Project Trips	8	12	0	0	0	0	0	4	0	0	0	3	27	
Office Project Trips	0	0	0	0	0	0	0	1	0	0	0	0	1	
TRAFFIX Rounding Adjust	0	0	0	0	0	0	0	1	0	0	0	0	1	
Total Project Trips	9	13	0	0	0	0	0	6	0	0	0	3	31	
Background + Project Conditions	306	273	114	216	741	135	53	540	237	96	424	197	3332	
													Bkgrd+Proj check	306 273 114 216 741 135 53 540 237 96 424 197



Intersection Number:	1																	
Traffic Node Number:	3293																	
Intersection Name:	N Capitol Avenue & Berryessa Road																	
Peak Hour:	PM																	
Count Date:	10/27/15																	
Scenario:	32 8 Plex Townhomes + 349 Apartments																	
													SJ Growth Factor (% Per Year):	0.01				
													Number of Years:	5.75				
														<b>Movements</b>				
														<b>North Approach</b>	<b>East Approach</b>	<b>South Approach</b>	<b>West Approach</b>	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total					
Existing Count (Oct 2015)	330	649	115	28	627	166	98	206	434	540	764	312	4269					
1% Annual Growth (SJ Count Adjustment)	19	37	7	2	36	10	6	12	25	31	44	18	245					
Existing Conditions (July 2020)	349	686	122	30	663	176	104	218	459	571	808	330	4514					
<b>Approved Project Trips</b>																		
San Jose ATI	22	20	3	1	23	8	7	11	53	67	27	14	256					
PDC04-017 Trips Removed	0	-4	0	0	0	-4	-2	-2	-26	-48	0	0	-86					
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total Approved Trips	22	16	3	1	23	4	5	9	27	19	27	14	170					
<b>Background Conditions</b>																		
	371	702	125	31	686	180	109	227	486	590	835	344	4684					
Bkgrd check	371	702	125	31	686	180	109	227	486	590	835	344						
<b>Project Trips</b>																		
8 Plex Townhomes Project Trips	0	2	0	0	0	0	0	1	2	4	0	0	9					
Apartments Project Trips	0	16	0	0	0	0	0	10	27	43	0	0	96					
Office Project Trips	0	1	0	0	0	0	0	1	3	1	0	0	6					
TRAFFIX Rounding Adjust	0	-1	0	0	0	0	0	0	0	0	0	0	-1					
Total Project Trips	0	18	0	0	0	0	0	12	32	48	0	0	110					
<b>Background + Project Conditions</b>																		
	371	720	125	31	686	180	109	239	518	638	835	344	4794					
Bkgrd+Proj check	371	720	125	31	686	180	109	239	518	638	835	344						

Intersection Number:	2																	
Traffic Node Number:	3388																	
Intersection Name:	N Capitol Avenue & Penitencia Creek Road																	
Peak Hour:	PM																	
Count Date:	04/04/18																	
Scenario:	32 8 Plex Townhomes + 349 Apartments																	
													SJ Growth Factor (% Per Year):	0.01				
													Number of Years:	3.25				
														<b>Movements</b>				
														<b>North Approach</b>	<b>East Approach</b>	<b>South Approach</b>	<b>West Approach</b>	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total					
Existing Count (April 2018)	26	996	422	162	2	55	63	440	11	4	3	16	2200					
1% Annual Growth (SJ Count Adjustment)	1	32	14	5	0	2	2	14	0	0	0	1	72					
Existing Conditions (July 2020)	27	1028	436	167	2	57	65	454	11	4	3	17	2272					
<b>Approved Project Trips</b>																		
San Jose ATI	57	20	7	6	4	2	22	13	28	15	2	31	207					
PDC04-017 Trips Removed	-57	0	0	0	-4	0	0	0	-28	-15	-2	-31	-137					
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total Approved Trips	0	20	7	6	0	2	22	13	0	0	0	0	70					
<b>Background Conditions</b>																		
	27	1048	443	173	2	59	87	467	11	4	3	17	2342					
Bkgrd check	27	1048	443	173	2	59	87	467	11	4	3	17						
<b>Project Trips</b>																		
8 Plex Townhomes Project Trips	6	0	0	0	0	0	0	0	2	1	0	3	12					
Apartments Project Trips	59	0	0	0	0	0	0	0	20	12	0	37	128					
Office Project Trips	2	0	0	0	0	0	0	0	1	1	0	4	8					
TRAFFIX Rounding Adjust	-1	0	0	0	0	0	0	0	-1	1	0	-1	-2					
Total Project Trips	66	0	0	0	0	0	0	0	22	15	0	43	146					
<b>Background + Project Conditions</b>																		
	93	1048	443	173	2	59	87	467	33	19	3	60	2488					
Bkgrd+Proj check	93	1048	443	173	2	59	87	467	33	19	3	60						

Intersection Number:	3																	
Traffic Node Number:	3385																	
Intersection Name:	N Capitol Avenue & Mabury Road																	
Peak Hour:	PM																	
Count Date:	09/25/18																	
Scenario:	32 8 Plex Townhomes + 349 Apartments																	
													SJ Growth Factor (% Per Year):	0.01				
													Number of Years:	2.83				
														<b>Movements</b>				
														<b>North Approach</b>	<b>East Approach</b>	<b>South Approach</b>	<b>West Approach</b>	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total					
Existing Count (September 2018)	107	592	258	97	234	97	92	258	146	194	539	132	2746					
1% Annual Growth (SJ Count Adjustment)	3	17	7	3	7	3	3	7	4	5	15	4	78					
Existing Conditions (July 2020)	110	609	265	100	241	100	95	265	150	199	554	136	2824					
<b>Approved Project Trips</b>																		
San Jose ATI	10	32	7	3	10	7	3	33	6	9	13	16	149					
PDC04-017 Trips Removed	-5	-10	0	0	0	0	0	-19	0	0	0	-9	-43					
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0					
Total Approved Trips	5	22	7	3	10	7	3	14	6	9	13	7	106					
<b>Background Conditions</b>																		
	115	631	272	103	251	107	98	279	156	208	567	143	2930					
Bkgrd check	115	631	272	103	251	107	98	279	156	208	567	143						
<b>Project Trips</b>																		
8 Plex Townhomes Project Trips	0	1	0	0	0	0	0	1	0	0	0	1	3					
Apartments Project Trips	5	7	0	0	0	0	0	12	0	0	0	8	32					
Office Project Trips	0	1	0	0	0	0	0	1	0	0	0	0	2					
TRAFFIX Rounding Adjust	0	0	0	0	0	0	0	-1	0	0	0	0	-1					
Total Project Trips	5	9	0	0	0	0	0	13	0	0	0	9	36					
<b>Background + Project Conditions</b>																		
	120	640	272	103	251	107	98	292	156	208	567	152	2966					
Bkgrd+Proj check	120	640	272	103	251	107	98	292	156	208	567	152						

**Appendix B**  
**ATI Sheets**





AM PROJECT TRIPS

05/27/2021

Intersection of : N Capitol Av & Mabury Rd

Traffic Node Number : 3385

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	11	19	3	1	4	0	1	2	1	2	4	2
NORTH SAN JOSE												
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	0	6	2	0	10	4	3	1	0	4	0	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	3	2	0	0	0	1	0	1	0	0	5	1
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	3	2	0	0	3	0	0	0	5	0	0	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
<i>This project is built and fully occupied.</i>												
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	0	0	0	0	0	2	0	0	1	0

TOTAL:	17	39	5	1	36	14	8	6	6	6	10	3
		29			17	5	4					
	LEFT	THRU	RIGHT									
NORTH	1	36	14									
EAST	6	10	3									
SOUTH	17	39	5									
WEST	9	6	6									



PM PROJECT TRIPS

05/27/2021

Intersection of : N Capitol Av & Mabury Rd

Traffic Node Number : 3385

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	0	1	0	6	15	3	1	7	3	5	7	3
NORTH SAN JOSE												
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	0	10	3	0	4	2	5	1	0	2	0	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC BERRYESSA FLEA MKT (OFFICE)	1	0	0	1	2	0	1	4	3	0	1	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	5	3	0	0	1	0	0	0	3	0	0	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	<del>2</del> 0	0	0	<del>10</del> 0	<del>8</del> 0	<del>8</del> 0	0	0	0	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	0	0	0	0	0	1	0	0	2	0

*This project is built and fully occupied.*

TOTAL:	6	<del>35</del> 14	3	7	<del>22</del> 22	<del>10</del> 5	<del>16</del> 7	13	9	7	10	3
	LEFT	THRU	RIGHT									
NORTH	7	32	10									
EAST	7	10	3									
SOUTH	6	33	3									
WEST	16	13	9									

**AM PROJECT TRIPS**

05/27/2021

Intersection of : N Capitol Av & Penitencia Creek Rd

Traffic Node Number : 3388

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	0	33	2	0	5	0	0	0	0	0	0	0
NORTH SAN JOSE												
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	15 0	0	0	0	0	31 0	31 0	1 0	28 0	0	2 0	0
<i>This project is built and fully occupied.</i>												
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	2	6	0	0	0	0	0	21	0	3

<b>TOTAL:</b>	15 0	33	4	6	5	31 0	31 0	1 0	28 0	21	2 0	3
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	LEFT	THRU	RIGHT
NORTH	6	5	31
EAST	21	2	3
SOUTH	15	33	4
WEST	57	4	28

**PM PROJECT TRIPS**

05/27/2021

Intersection of : N Capitol Av & Penitencia Creek Rd

Traffic Node Number : 3388

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	0	13	1	4	20	0	0	0	0	0	0	0
NORTH SAN JOSE												
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	28 0	0	0	0	0	31 0	31 0	2 0	15 0	0	1 0	0
<i>This project is built and fully occupied.</i>												
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	21	3	0	0	0	0	0	2	0	6

<b>TOTAL:</b>	28 0	13	22	7	20	31 0	31 0	2 0	15 0	2	1 0	6
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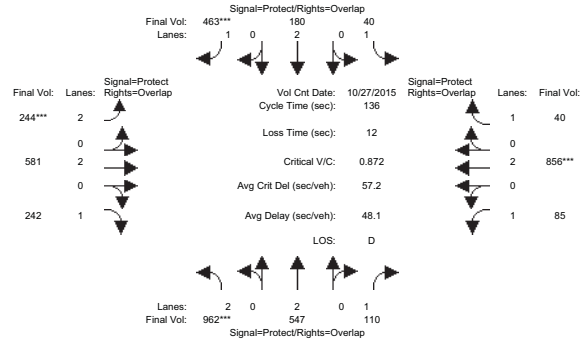
	LEFT	THRU	RIGHT
NORTH	7	20	57
EAST	2	4	6
SOUTH	28	13	22
WEST	31	2	15

**Appendix C**  
**Level of Service Calculations**

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3293: N Capitol Av / Berryessa Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
	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: >> Count Date: 27 Oct 2015 << 7:30-8:30												
Base Vol:	962	547	110	40	180	463	244	581	242	85	856	40
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:	962	547	110	40	180	463	244	581	242	85	856	40
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:	962	547	110	40	180	463	244	581	242	85	856	40
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:	962	547	110	40	180	463	244	581	242	85	856	40
Reduce Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	962	547	110	40	180	463	244	581	242	85	856	40
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
Final Volume:	962	547	110	40	180	463	244	581	242	85	856	40

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

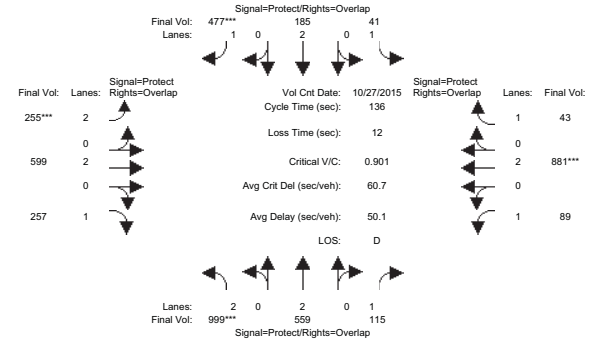
Capacity Analysis Module:												
Vol/Sat:	0.31	0.14	0.06	0.02	0.05	0.26	0.08	0.15	0.14	0.05	0.23	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	47.6	50.8	62.7	26.0	29.2	41.3	12.1	35.3	82.9	11.9	35.1	61.1
Volume/Cap:	0.87	0.39	0.14	0.12	0.22	0.87	0.87	0.59	0.23	0.56	0.87	0.05
Delay/Veh:	49.1	31.3	21.1	45.7	44.2	59.5	85.7	44.9	12.1	64.0	56.9	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:	49.1	31.3	21.1	45.7	44.2	59.5	85.7	44.9	12.1	64.0	56.9	21.1
LOS by Move:	D	C	C	D	D	E	F	D	B	E	E	C
DesignQueue:	31	13	5	3	5	28	10	17	8	6	26	2

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3293: N Capitol Av / Berryessa Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
	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: >> Count Date: 27 Oct 2015 << 7:30-8:30												
Base Vol:	962	547	110	40	180	463	244	581	242	85	856	40
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:	962	547	110	40	180	463	244	581	242	85	856	40
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	37	12	5	1	5	14	11	18	15	4	25	3
Initial Fut:	999	559	115	41	185	477	255	599	257	89	881	43
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:	999	559	115	41	185	477	255	599	257	89	881	43
Reduce Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	999	559	115	41	185	477	255	599	257	89	881	43
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
Final Volume:	999	559	115	41	185	477	255	599	257	89	881	43

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

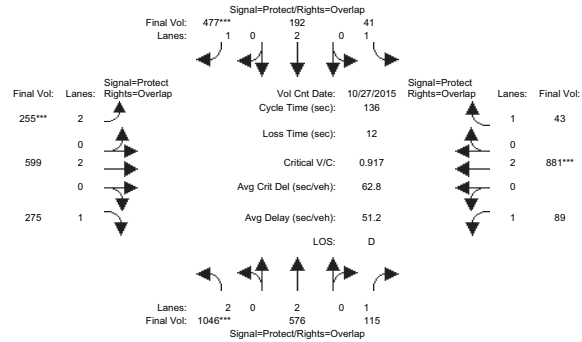
Capacity Analysis Module:												
Vol/Sat:	0.32	0.15	0.07	0.02	0.05	0.27	0.08	0.16	0.15	0.05	0.23	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	47.9	51.2	62.8	25.6	28.9	41.1	12.2	35.6	83.5	11.6	35.0	60.6
Volume/Cap:	0.90	0.39	0.14	0.12	0.23	0.90	0.90	0.60	0.24	0.60	0.90	0.06
Delay/Veh:	52.0	31.2	21.2	46.1	44.5	63.9	90.7	45.0	12.0	66.3	60.1	21.5
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:	52.0	31.2	21.2	46.1	44.5	63.9	90.7	45.0	12.0	66.3	60.1	21.5
LOS by Move:	D	C	C	D	D	E	F	D	B	E	E	C
DesignQueue:	32	14	5	3	6	29	11	17	8	7	26	2

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3293: N Capitol Av / Berryessa Rd



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:	>>	Count	Date:	27 Oct 2015	<<	7:30-8:30
Base Vol:	962	547	110	40	180	463
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	962	547	110	40	180	463
Added Vol:	47	17	0	0	7	0
ATI:	37	12	5	1	5	14
Initial Fut:	1046	576	115	41	192	477
User Adj:	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
PHF Volume:	1046	576	115	41	192	477
Reduce Vol:	0	0	0	0	0	0
Reduced Vol:	1046	576	115	41	192	477
PCE Adj:	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
Final Volume:	1046	576	115	41	192	477

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750	

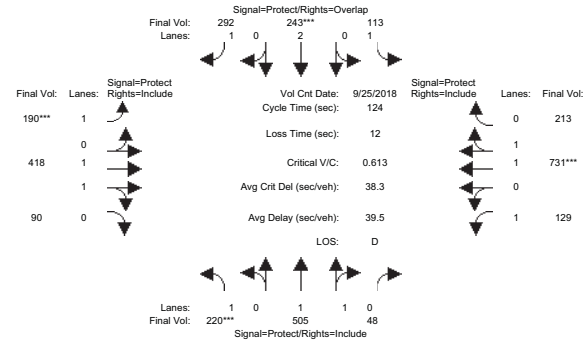
Capacity Analysis Module:	Vol/Sat:	0.33	0.15	0.07	0.02	0.05	0.27	0.08	0.16	0.16	0.05	0.23	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	49.2	52.3	63.7	25.4	28.4	40.4	12.0	35.0	84.2	11.4	34.4	59.7	
Volume/Cap:	0.92	0.39	0.14	0.13	0.24	0.92	0.92	0.61	0.25	0.61	0.92	0.06	
Delay/Veh:	53.0	30.6	20.7	46.3	45.0	67.4	94.6	45.7	11.8	67.2	62.7	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:	53.0	30.6	20.7	46.3	45.0	67.4	94.6	45.7	11.8	67.2	62.7	22.0	
LOS by Move:	D	C	C	D	D	E	F	D	B	E	E	C	
DesignQueue:	33	14	5	3	6	30	11	18	9	7	26	2	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	7:35-8:35AM
Base Vol:	220	505	48	113	243	292
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	505	48	113	243	292
Added Vol:	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0
Initial Fut:	220	505	48	113	243	292
User Adj:	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
PHF Volume:	220	505	48	113	243	292
Reduce Vol:	0	0	0	0	0	0
Reduced Vol:	220	505	48	113	243	292
PCE Adj:	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
Final Volume:	220	505	48	113	243	292

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95	
Lanes:	1.00	1.82	0.18	1.00	2.00	1.00	1.00	1.64	0.36	1.00	1.54	0.46	
Final Sat.:	1750	3379	321	1750	3800	1750	1750	3044	655	1750	2865	835	

Capacity Analysis Module:	Vol/Sat:	0.13	0.15	0.15	0.06	0.06	0.17	0.11	0.14	0.14	0.07	0.26	0.26
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	25.4	26.8	26.8	11.6	12.9	34.9	22.0	47.9	47.9	25.7	51.6	51.6	
Volume/Cap:	0.61	0.69	0.69	0.69	0.61	0.59	0.61	0.36	0.36	0.36	0.61	0.61	
Delay/Veh:	47.9	47.4	47.4	66.4	56.0	40.3	50.7	27.2	27.2	42.7	29.1	29.1	
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:	47.9	47.4	47.4	66.4	56.0	40.3	50.7	27.2	27.2	42.7	29.1	29.1	
LOS by Move:	D	D	D	E	E	D	D	C	C	D	C	C	
DesignQueue:	14	16	16	8	8	16	12	11	11	8	21	21	

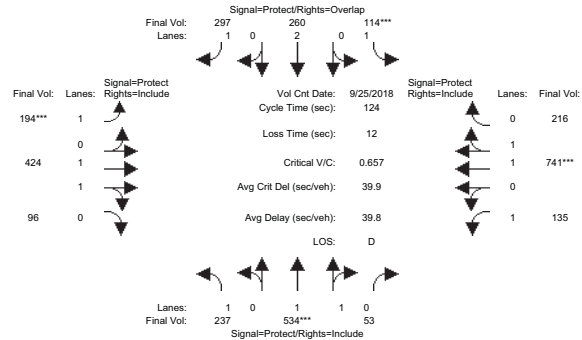
Note: Queue reported is the number of cars per lane.



905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	7:35-8:35AM						
Base Vol:	220	505	48	113	243	292	190	418	90	129	731	213
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:	220	505	48	113	243	292	190	418	90	129	731	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	17	29	5	1	17	5	4	6	6	6	10	3
Initial Fut:	237	534	53	114	260	297	194	424	96	135	741	216
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:	237	534	53	114	260	297	194	424	96	135	741	216
Reduce Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	534	53	114	260	297	194	424	96	135	741	216
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
Final Volume:	237	534	53	114	260	297	194	424	96	135	741	216

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95	
Lanes:	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.62	0.38	1.00	1.54	0.46	
Final Sat.:	1750	3366	334	1750	3800	1750	1750	3016	683	1750	2864	835	

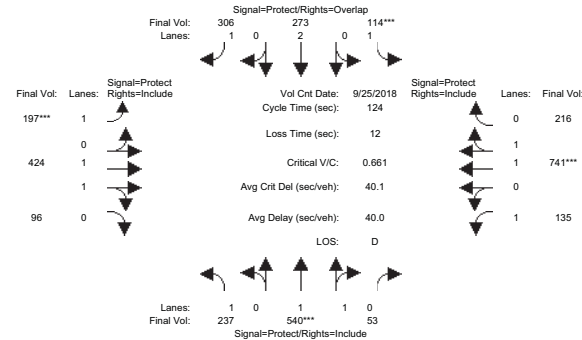
Capacity Analysis Module:	Vol/Sat:	0.14	0.16	0.16	0.07	0.07	0.17	0.11	0.14	0.14	0.08	0.26	0.26
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	26.5	29.9	29.9	12.3	15.8	36.7	20.9	45.0	45.0	24.7	48.8	48.8	
Volume/Cap:	0.63	0.66	0.66	0.66	0.54	0.57	0.66	0.39	0.39	0.39	0.66	0.66	
Delay/Veh:	47.9	44.2	44.2	62.7	51.9	38.6	53.5	29.4	29.4	43.8	31.8	31.8	
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:	47.9	44.2	44.2	62.7	51.9	38.6	53.5	29.4	29.4	43.8	31.8	31.8	
LOS by Move:	D	D	D	E	D	D	D	C	C	D	C	C	
DesignQueue:	14	16	16	8	8	16	12	12	12	8	22	22	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	7:35-8:35AM						
Base Vol:	220	505	48	113	243	292	190	418	90	129	731	213
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:	220	505	48	113	243	292	190	418	90	129	731	213
Added Vol:	0	6	0	0	13	9	3	0	0	0	0	0
ATI:	17	29	5	1	17	5	4	6	6	6	10	3
Initial Fut:	237	540	53	114	273	306	197	424	96	135	741	216
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:	237	540	53	114	273	306	197	424	96	135	741	216
Reduce Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	540	53	114	273	306	197	424	96	135	741	216
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
Final Volume:	237	540	53	114	273	306	197	424	96	135	741	216

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95	
Lanes:	1.00	1.82	0.18	1.00	2.00	1.00	1.00	1.62	0.38	1.00	1.54	0.46	
Final Sat.:	1750	3369	331	1750	3800	1750	1750	3016	683	1750	2864	835	

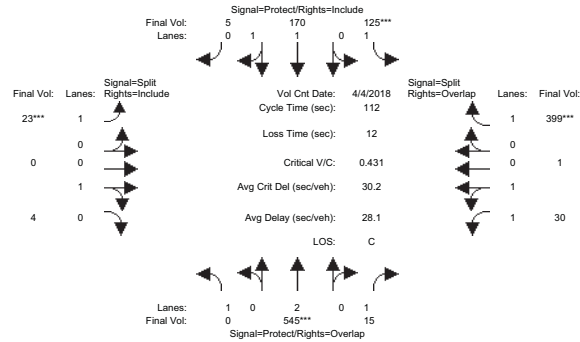
Capacity Analysis Module:	Vol/Sat:	0.14	0.16	0.16	0.07	0.07	0.17	0.11	0.14	0.14	0.08	0.26	0.26
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	26.5	30.1	30.1	12.2	15.8	36.9	21.1	45.0	45.0	24.7	48.6	48.6	
Volume/Cap:	0.63	0.66	0.66	0.66	0.56	0.59	0.66	0.39	0.39	0.39	0.66	0.66	
Delay/Veh:	47.8	44.2	44.2	63.0	52.4	38.8	53.5	29.5	29.5	43.8	32.1	32.1	
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:	47.8	44.2	44.2	63.0	52.4	38.8	53.5	29.5	29.5	43.8	32.1	32.1	
LOS by Move:	D	D	D	E	D	D	D	C	C	D	C	C	
DesignQueue:	14	17	17	8	8	17	13	12	12	8	22	22	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	4 Apr 2018	<<	7:00-8:00AM						
Base Vol:	0	545	15	125	170	5	23	0	4	30	1	399
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:	0	545	15	125	170	5	23	0	4	30	1	399
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:	0	545	15	125	170	5	23	0	4	30	1	399
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:	0	545	15	125	170	5	23	0	4	30	1	399
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	545	15	125	170	5	23	0	4	30	1	399
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
Final Volume:	0	545	15	125	170	5	23	0	4	30	1	399

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	1.94	0.06	1.00	0.00	1.00	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3594	106	1750	0	1800	3435	115	1750

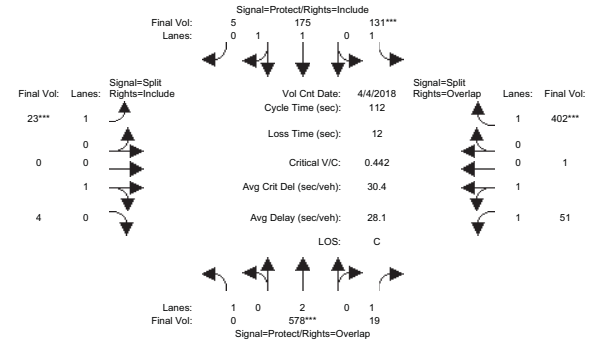
Capacity Analysis Module:	Vol/Sat:	0.00	0.14	0.01	0.07	0.05	0.05	0.01	0.00	0.00	0.01	0.01	0.23
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	0.0	34.8	72.7	17.3	52.1	52.1	10.0	0.0	10.0	37.9	37.9	55.2	
Volume/Cap:	0.00	0.46	0.01	0.46	0.10	0.10	0.15	0.00	0.02	0.03	0.03	0.46	
Delay/Veh:	0.0	32.4	7.0	48.7	17.0	17.0	49.0	0.0	46.8	24.7	24.7	20.4	
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:	0.0	32.4	7.0	48.7	17.0	17.0	49.0	0.0	46.8	24.7	24.7	20.4	
LOS by Move:	A	C	A	D	B	B	D	A	D	C	C	C	
DesignQueue:	0	12	0	7	3	3	1	0	0	1	1	15	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	4 Apr 2018	<<	7:00-8:00AM						
Base Vol:	0	545	15	125	170	5	23	0	4	30	1	399
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:	0	545	15	125	170	5	23	0	4	30	1	399
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	33	4	6	5	0	0	0	0	21	0	3
Initial Fut:	0	578	19	131	175	5	23	0	4	51	1	402
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:	0	578	19	131	175	5	23	0	4	51	1	402
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	578	19	131	175	5	23	0	4	51	1	402
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
Final Volume:	0	578	19	131	175	5	23	0	4	51	1	402

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	1.94	0.06	1.00	0.00	1.00	1.96	0.04	1.00
Final Sat.:	1750	3800	1750	1750	3597	103	1750	0	1800	3482	68	1750

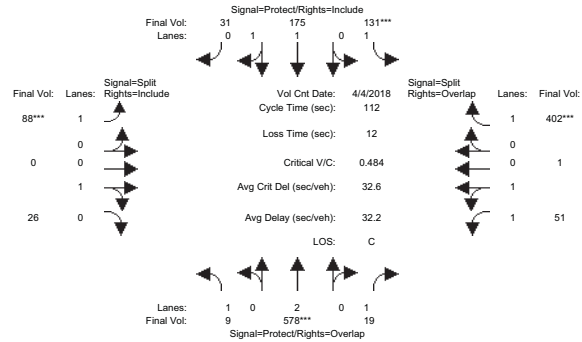
Capacity Analysis Module:	Vol/Sat:	0.00	0.15	0.01	0.07	0.05	0.05	0.01	0.00	0.00	0.01	0.01	0.23
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	0.0	35.9	72.4	17.6	53.5	53.5	10.0	0.0	10.0	36.5	36.5	54.1	
Volume/Cap:	0.00	0.48	0.02	0.48	0.10	0.10	0.15	0.00	0.02	0.04	0.04	0.48	
Delay/Veh:	0.0	31.9	7.1	48.7	16.2	16.2	49.0	0.0	46.8	25.9	25.9	21.3	
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:	0.0	31.9	7.1	48.7	16.2	16.2	49.0	0.0	46.8	25.9	25.9	21.3	
LOS by Move:	A	C	A	D	B	B	D	A	D	C	C	C	
DesignQueue:	0	13	0	8	3	3	1	0	0	1	1	15	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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: >> Count Date: 4 Apr 2018 << 7:00-8:00AM												
Base Vol:	0	545	15	125	170	5	23	0	4	30	1	399
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:	0	545	15	125	170	5	23	0	4	30	1	399
Added Vol:	9	0	0	0	0	26	65	0	22	0	0	0
ATI:	0	33	4	6	5	0	0	0	0	21	0	3
Initial Fut:	9	578	19	131	175	31	88	0	26	51	1	402
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:	9	578	19	131	175	31	88	0	26	51	1	402
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	578	19	131	175	31	88	0	26	51	1	402
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
Final Volume:	9	578	19	131	175	31	88	0	26	51	1	402

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	0.00	1.00	1.96	0.04	1.00
Final Sat.:	1750	3800	1750	1750	3143	557	1750	0	1800	3482	68	1750

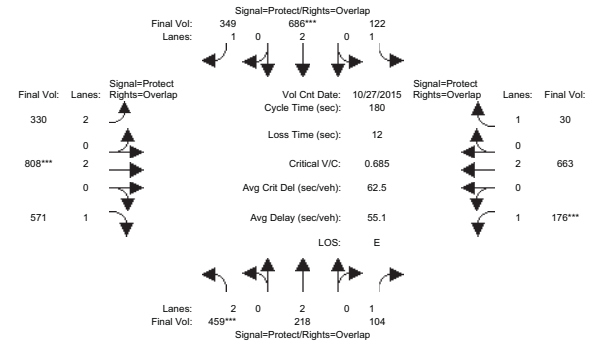
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.01	0.07	0.06	0.06	0.05	0.00	0.01	0.01	0.01	0.23
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	21.6	35.2	71.0	17.3	30.9	30.9	11.6	0.0	11.6	35.8	35.8	53.2
Volume/Cap:	0.03	0.48	0.02	0.48	0.20	0.20	0.48	0.00	0.14	0.05	0.05	0.48
Delay/Veh:	36.8	32.5	7.6	49.3	31.5	31.5	56.3	0.0	47.2	26.4	26.4	22.1
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:	36.8	32.5	7.6	49.3	31.5	31.5	56.3	0.0	47.2	26.4	26.4	22.1
LOS by Move:	D	C	A	D	C	E	A	D	C	C	C	C
DesignQueue:	0	13	0	8	5	5	5	0	2	1	1	15

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3293: N Capitol Av / Berryessa Rd



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: >> Count Date: 27 Oct 2015 << 4:55-5:55												
Base Vol:	459	218	104	122	686	349	330	808	571	176	663	30
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:	459	218	104	122	686	349	330	808	571	176	663	30
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:	459	218	104	122	686	349	330	808	571	176	663	30
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:	459	218	104	122	686	349	330	808	571	176	663	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	459	218	104	122	686	349	330	808	571	176	663	30
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
Final Volume:	459	218	104	122	686	349	330	808	571	176	663	30

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

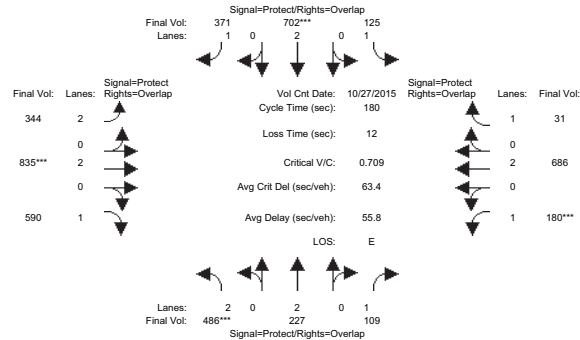
Capacity Analysis Module:												
Vol/Sat:	0.15	0.06	0.06	0.07	0.18	0.20	0.10	0.21	0.33	0.10	0.17	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	38.3	38.7	65.1	47.0	47.4	78.3	30.9	55.9	94.1	26.4	51.4	98.4
Volume/Cap:	0.69	0.27	0.16	0.27	0.69	0.46	0.61	0.69	0.62	0.69	0.61	0.03
Delay/Veh:	68.3	59.0	39.1	53.1	61.6	36.3	71.1	56.1	31.7	80.3	56.7	18.8
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:	68.3	59.0	39.1	53.1	61.6	36.3	71.1	56.1	31.7	80.3	56.7	18.8
LOS by Move:	E	E	D	E	D	E	E	E	C	F	E	B
DesignQueue:	23	9	7	10	27	23	17	30	32	17	25	1

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3293: N Capitol Av / Berryessa Rd



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: >> Count Date: 27 Oct 2015 << 4:55-5:55												
Base Vol:	459	218	104	122	686	349	330	808	571	176	663	30
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:	459	218	104	122	686	349	330	808	571	176	663	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	27	9	5	3	16	22	14	27	19	4	23	1
Initial Fut:	486	227	109	125	702	371	344	835	590	180	686	31
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:	486	227	109	125	702	371	344	835	590	180	686	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	486	227	109	125	702	371	344	835	590	180	686	31
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
Final Volume:	486	227	109	125	702	371	344	835	590	180	686	31

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

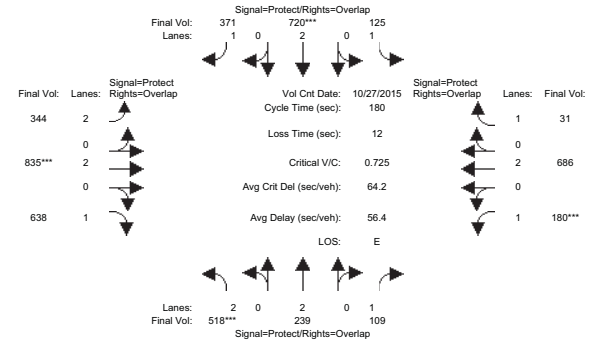
Capacity Analysis Module:												
Vol/Sat:	0.15	0.06	0.06	0.07	0.18	0.21	0.11	0.22	0.34	0.10	0.18	0.02
Crit Moves:	****			****			****			****		
Green Time:	39.2	39.2	65.3	46.9	46.9	77.8	30.9	55.8	95.0	26.1	51.0	97.9
Volume/Cap:	0.71	0.27	0.17	0.27	0.71	0.49	0.64	0.71	0.64	0.71	0.64	0.03
Delay/Veh:	68.6	58.7	39.1	53.3	62.8	37.3	71.9	56.9	31.8	82.2	57.6	19.1
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:	68.6	58.7	39.1	53.3	62.8	37.3	71.9	56.9	31.8	82.2	57.6	19.1
LOS by Move:	E	E	D	D	E	D	E	E	C	F	E	B
DesignQueue:	24	9	8	10	27	24	18	31	33	17	26	2

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

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Background + Project PM

Intersection #3293: N Capitol Av / Berryessa Rd



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: >> Count Date: 27 Oct 2015 << 4:55-5:55												
Base Vol:	459	218	104	122	686	349	330	808	571	176	663	30
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:	459	218	104	122	686	349	330	808	571	176	663	30
Added Vol:	32	12	0	0	18	0	0	0	48	0	0	0
ATI:	27	9	5	3	16	22	14	27	19	4	23	1
Initial Fut:	518	239	109	125	720	371	344	835	638	180	686	31
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:	518	239	109	125	720	371	344	835	638	180	686	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	239	109	125	720	371	344	835	638	180	686	31
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
Final Volume:	518	239	109	125	720	371	344	835	638	180	686	31

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

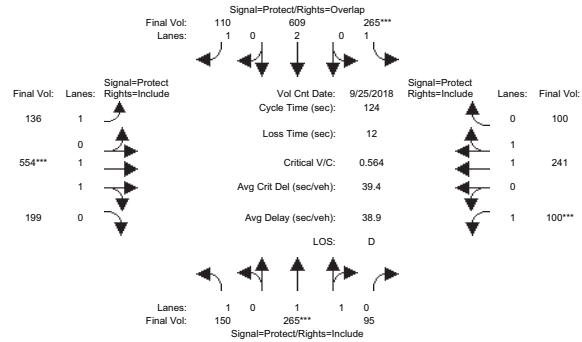
Capacity Analysis Module:												
Vol/Sat:	0.16	0.06	0.06	0.07	0.19	0.21	0.11	0.22	0.36	0.10	0.18	0.02
Crit Moves:	****			****			****			****		
Green Time:	40.8	41.2	66.7	46.7	47.1	77.2	30.2	54.6	95.4	25.5	49.9	96.7
Volume/Cap:	0.72	0.28	0.17	0.28	0.72	0.49	0.65	0.72	0.69	0.72	0.65	0.03
Delay/Veh:	68.1	57.3	38.2	53.5	63.3	37.7	72.9	58.3	33.5	84.0	58.8	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:	68.1	57.3	38.2	53.5	63.3	37.7	72.9	58.3	33.5	84.0	58.8	19.7
LOS by Move:	E	E	D	D	E	D	E	E	C	F	E	B
DesignQueue:	25	9	8	10	28	24	18	31	36	17	26	2

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

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2000 HCM Operations (Future Volume Alternative)  
Existing PM

Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	4:50-5:50PM
Base Vol:	150	265	95	265	609	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	265	95	265	609	110
Added Vol:	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0
Initial Fut:	150	265	95	265	609	110
User Adj:	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
PHF Volume:	150	265	95	265	609	110
Reduce Vol:	0	0	0	0	0	0
Reduced Vol:	150	265	95	265	609	110
PCE Adj:	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
Final Volume:	150	265	95	265	609	110

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.46	0.54	1.00	2.00	1.00	1.00	1.46	0.54	1.00	1.40	0.60
Final Sat.:	1750	2723	976	1750	3800	1750	1750	2721	978	1750	2614	1085

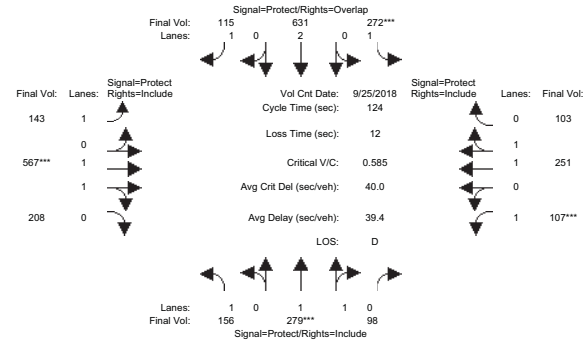
Capacity Analysis Module:	Vol/Sat:	0.09	0.10	0.10	0.15	0.16	0.06	0.08	0.20	0.20	0.06	0.09	0.09
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	19.1	21.4	21.4	33.3	35.6	61.8	26.2	44.8	44.8	12.6	31.1	31.1	
Volume/Cap:	0.56	0.56	0.56	0.56	0.56	0.13	0.37	0.56	0.56	0.56	0.37	0.37	
Delay/Veh:	51.2	48.2	48.2	40.7	38.1	16.7	42.4	32.4	32.4	57.3	38.6	38.6	
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:	51.2	48.2	48.2	40.7	38.1	16.7	42.4	32.4	32.4	57.3	38.6	38.6	
LOS by Move:	D	D	D	D	D	B	D	C	C	E	D	D	
DesignQueue:	10	11	11	15	16	4	8	18	18	7	9	9	

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

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Background PM

Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	4:50-5:50PM
Base Vol:	150	265	95	265	609	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	265	95	265	609	110
Added Vol:	0	0	0	0	0	0
ATI:	6	14	3	7	22	5
Initial Fut:	156	279	98	272	631	115
User Adj:	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
PHF Volume:	156	279	98	272	631	115
Reduce Vol:	0	0	0	0	0	0
Reduced Vol:	156	279	98	272	631	115
PCE Adj:	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
Final Volume:	156	279	98	272	631	115

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.47	0.53	1.00	2.00	1.00	1.00	1.45	0.55	1.00	1.40	0.60
Final Sat.:	1750	2737	962	1750	3800	1750	1750	2706	993	1750	2623	1076

Capacity Analysis Module:	Vol/Sat:	0.09	0.10	0.10	0.16	0.17	0.07	0.08	0.21	0.21	0.06	0.10	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	19.1	21.6	21.6	33.0	35.5	62.0	26.4	44.4	44.4	13.0	31.0	31.0	
Volume/Cap:	0.58	0.58	0.58	0.58	0.58	0.13	0.38	0.58	0.58	0.58	0.38	0.38	
Delay/Veh:	51.9	48.4	48.4	41.5	38.6	16.7	42.4	33.0	33.0	57.7	38.9	38.9	
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:	51.9	48.4	48.4	41.5	38.6	16.7	42.4	33.0	33.0	57.7	38.9	38.9	
LOS by Move:	D	D	D	D	D	B	D	C	C	E	D	D	
DesignQueue:	10	11	11	16	16	4	9	19	19	7	10	10	

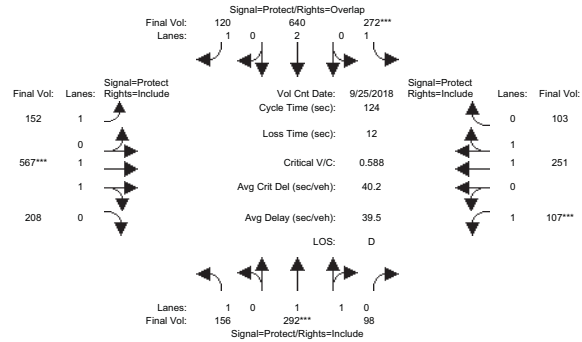
Note: Queue reported is the number of cars per lane.



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Intersection #3385: N Capitol Av / Mabury Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	25 Sep 2018	<<	4:50-5:50PM
Base Vol:	150	265	95	265	609	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	265	95	265	609	110
Added Vol:	0	13	0	0	9	5
ATI:	6	14	3	7	22	5
Initial Fut:	156	292	98	272	640	120
User Adj:	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
PHF Volume:	156	292	98	272	640	120
Reduct Vol:	0	0	0	0	0	0
Reduced Vol:	156	292	98	272	640	120
PCE Adj:	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
Final Volume:	156	292	98	272	640	120

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95	
Lanes:	1.00	1.48	0.52	1.00	2.00	1.00	1.00	1.45	0.55	1.00	1.40	0.60	
Final Sat.:	1750	2770	930	1750	3800	1750	1750	2706	993	1750	2623	1076	

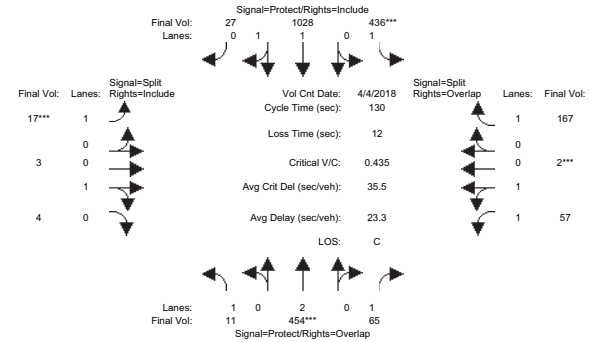
Capacity Analysis Module:	Vol/Sat:	0.09	0.11	0.11	0.16	0.17	0.07	0.09	0.21	0.21	0.06	0.10	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	19.0	22.2	22.2	32.8	35.9	63.1	27.1	44.1	44.1	12.9	29.9	29.9	
Volume/Cap:	0.58	0.59	0.59	0.59	0.58	0.13	0.40	0.59	0.59	0.59	0.40	0.40	
Delay/Veh:	52.0	48.1	48.1	41.7	38.4	16.1	42.1	33.2	33.2	58.0	39.8	39.8	
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:	52.0	48.1	48.1	41.7	38.4	16.1	42.1	33.2	33.2	58.0	39.8	39.8	
LOS by Move:	D	D	D	D	D	B	D	C	C	E	D	D	
DesignQueue:	10	12	12	16	16	4	9	19	19	7	10	10	

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

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Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	4 Apr 2018	<<	4:40-5:40PM
Base Vol:	11	454	65	436	1028	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	454	65	436	1028	27
Added Vol:	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0
Initial Fut:	11	454	65	436	1028	27
User Adj:	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
PHF Volume:	11	454	65	436	1028	27
Reduct Vol:	0	0	0	0	0	0
Reduced Vol:	11	454	65	436	1028	27
PCE Adj:	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
Final Volume:	11	454	65	436	1028	27

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.92	0.95	0.95	0.93	0.95	0.92	
Lanes:	1.00	2.00	1.00	1.00	1.95	0.05	1.00	0.43	0.57	1.93	0.07	1.00	
Final Sat.:	1750	3800	1750	1750	3605	95	1750	771	1029	3430	120	1750	

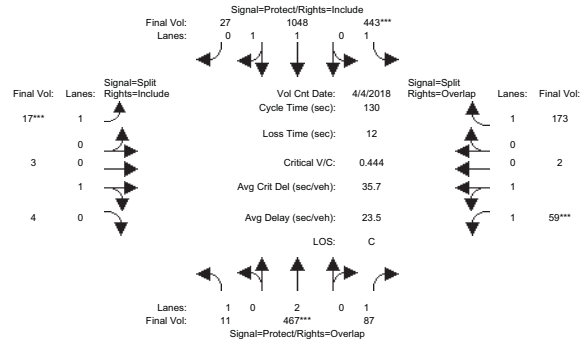
Capacity Analysis Module:	Vol/Sat:	0.01	0.12	0.04	0.25	0.29	0.29	0.01	0.00	0.00	0.02	0.02	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	
Green Time:	15.6	31.8	41.8	66.2	82.4	82.4	10.0	10.0	10.0	10.0	10.0	76.2	
Volume/Cap:	0.05	0.49	0.12	0.49	0.45	0.45	0.13	0.05	0.05	0.22	0.22	0.16	
Delay/Veh:	51.2	44.0	31.5	22.7	12.8	12.8	57.9	56.3	56.3	58.1	58.1	12.6	
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:	51.2	44.0	31.5	22.7	12.8	12.8	57.9	56.3	56.3	58.1	58.1	12.6	
LOS by Move:	D	D	C	C	B	B	E	E	E	E	E	B	
DesignQueue:	1	13	3	18	15	15	1	0	0	2	2	6	

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

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San Jose, CA

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Background PM

Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	4 Apr 2018	<<	4:40-5:40PM						
Base Vol:	11	454	65	436	1028	27	17	3	4	57	2	167
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:	11	454	65	436	1028	27	17	3	4	57	2	167
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	13	22	7	20	0	0	0	0	2	0	6
Initial Fut:	11	467	87	443	1048	27	17	3	4	59	2	173
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:	11	467	87	443	1048	27	17	3	4	59	2	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	467	87	443	1048	27	17	3	4	59	2	173
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
Final Volume:	11	467	87	443	1048	27	17	3	4	59	2	173

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.92	0.95	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	1.95	0.05	1.00	0.43	0.57	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3607	93	1750	771	1029	3434	116	1750

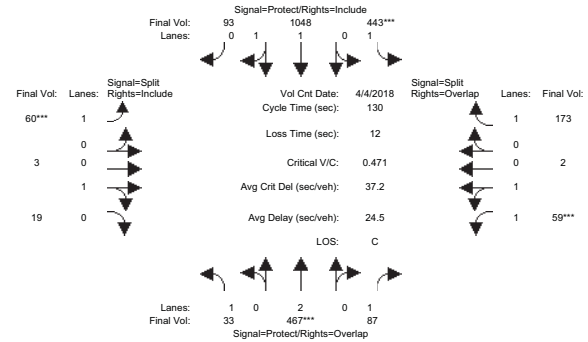
Capacity Analysis Module:	Vol/Sat:	0.01	0.12	0.05	0.25	0.29	0.29	0.01	0.00	0.00	0.02	0.02	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	15.3	32.0	42.0	66.0	82.7	82.7	10.0	10.0	10.0	10.0	10.0	76.0	
Volume/Cap:	0.05	0.50	0.15	0.50	0.46	0.46	0.13	0.05	0.05	0.22	0.22	0.17	
Delay/Veh:	51.4	44.0	31.9	23.1	12.8	12.8	57.9	56.3	56.3	58.2	58.2	12.8	
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:	51.4	44.0	31.9	23.1	12.8	12.8	57.9	56.3	56.3	58.2	58.2	12.8	
LOS by Move:	D	D	C	C	B	B	E	E	E	E	E	B	
DesignQueue:	1	13	5	18	16	16	1	0	0	2	2	6	

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

905 N Capitol Avenue Residential Project  
32 8 Plex Townhomes, 349 Apartments, & 3,000 SF of Office  
San Jose, CA

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

Intersection #3388: N Capitol Av / Penitencia Creek Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	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:	>>	Count	Date:	4 Apr 2018	<<	4:40-5:40PM						
Base Vol:	11	454	65	436	1028	27	17	3	4	57	2	167
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:	11	454	65	436	1028	27	17	3	4	57	2	167
Added Vol:	22	0	0	0	0	66	43	0	15	0	0	0
ATI:	0	13	22	7	20	0	0	0	0	2	0	6
Initial Fut:	33	467	87	443	1048	93	60	3	19	59	2	173
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:	33	467	87	443	1048	93	60	3	19	59	2	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	467	87	443	1048	93	60	3	19	59	2	173
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
Final Volume:	33	467	87	443	1048	93	60	3	19	59	2	173

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	1.83	0.17	1.00	0.14	0.86	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3398	302	1750	245	1555	3434	116	1750

Capacity Analysis Module:	Vol/Sat:	0.02	0.12	0.05	0.25	0.31	0.31	0.03	0.01	0.01	0.02	0.02	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	14.6	32.0	42.0	66.0	83.4	83.4	10.0	10.0	10.0	10.0	10.0	76.0	
Volume/Cap:	0.17	0.50	0.15	0.50	0.48	0.48	0.45	0.16	0.16	0.22	0.22	0.17	
Delay/Veh:	54.1	44.0	31.9	23.1	12.8	12.8	67.7	58.5	58.5	58.2	58.2	12.8	
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:	54.1	44.0	31.9	23.1	12.8	12.8	67.7	58.5	58.5	58.2	58.2	12.8	
LOS by Move:	D	D	C	C	B	B	E	E	E	E	E	B	
DesignQueue:	2	13	5	18	17	17	4	2	2	2	2	6	

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