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# HEXAGON TRANSPORTATION CONSULTANTS, INC.



## Via Del Oro Data Center Development



### Transportation Analysis

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## Executive Summary

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This report presents the results of a Transportation Analysis (TA) for the proposed data center development located along Via Del Oro in the City of San Jose. The project site is bounded by Via Del Oro to the north, San Ignacio Avenue to the west, Great Oaks Boulevard to the east, and vacant land to the south. The proposed project consists of the construction of three two-story data center buildings that will each be approximately 182,350 square feet (s.f.) in size for a total of 547,050 s.f. of building space. Primary access to the project site would be provided via a full access driveway along Great Oaks Boulevard. The site also will be served by one service driveway along Via Del Oro and three along San Ignacio Avenue.

### Transportation Analysis Scope

The transportation analysis of the project was evaluated following the standards and methodologies set forth in the City of San Jose's Transportation Analysis Policy (Council Policy 5-1), the City of San Jose *Transportation Analysis Handbook 2018*, and by the California Environmental Quality Act (CEQA). Per the requirements of the City of San Jose's Transportation Policy and *Transportation Analysis Handbook 2018*, the TA report for the project consists of a CEQA vehicle-miles-traveled (VMT) analysis and a supplemental Local Transportation Analysis (LTA).

### CEQA Transportation Analysis Scope

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

### Local Transportation Analysis Scope

The LTA includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. The LTA supplements the CEQA VMT analysis and provides analysis for use by the City of San Jose in identifying potential improvement of the transportation system with a focus on improving multi-modal travel. The LTA is required per the City of San Jose Transportation Policy, however, the operational deficiencies identified as part of the LTA are not considered impacts per CEQA guidelines.



## CEQA VMT Analysis

### CEQA Transportation Analysis Exemption Criteria

The City of San Jose Transportation Analysis Handbook identifies screening criteria that determine whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required.

The project site is located within a planned growth area (Edenvale Area Development Policy or EADP). The project's data center square footage was converted into equivalent industrial space. The 109,000 s.f. of equivalent industrial space for the proposed project would exceed the City's small industrial infill project criterion of 30,000 s.f. In addition, the existing area VMT per employee of 14.66 exceeds the City's established CEQA threshold of 14.37 per employee. Therefore, a CEQA Transportation Analysis was required.

### Project Impacts and Mitigation Measures

**Project Impact:** The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the project is projected to generate 14.65 VMT per employee, which would exceed the established impact threshold of 14.37 VMT per employee for industrial employment uses. Therefore, the project would result in an impact on the transportation system based on the City's VMT impact criteria.

**Mitigation Measures:** Based on preliminary direction from City staff, the project will be required to implement the following multi-modal facility improvements to reduce the project's VMT impact to less than significant levels.

- Expand the Reach of Bike Access with Investment in Infrastructure (Tier 2 – Bike Access Improvements): Implement bicycle facilities that close gaps in the bicycle network and/or improve the existing bicycle network (e.g. construct barrier or buffer for an existing bike lane). Improving bike access to the project promotes biking as an alternative to driving and reduces VMT. The San Jose Better Bike Plan 2025 identifies Class II bike lanes along Via Del Oro between Bernal Road and Raleigh Road. Additionally, the existing Class II bike lanes along Great Oaks Boulevard, San Ignacio Avenue, and Santa Teresa Boulevard in the project vicinity are planned to be converted to Class IV protected bike lanes. The project will be required to implement Class II bike lanes along Via Del Oro on the opposing side of the project frontage between San Ignacio Avenue and Great Oaks Boulevard. **And**
- Provide Pedestrian Network Improvements for Active Transportation (Tier 2 – Pedestrian Access Improvements): Implement pedestrian improvements both on-site and in the surrounding area. Improving pedestrian connections encourages people to walk instead of drive and reduces VMT. The project will be required to remove each of the pork chop islands on the north leg (Great Oaks Boulevard) at the Santa Teresa Boulevard/Great Oaks Boulevard intersection to improve pedestrian safety and access. A signal modification will be needed for the implementation of the pork-chop island removals at the northeast and northwest corners of Santa Teresa Boulevard/Great Oaks Boulevard intersection. In-lieu of the installed ADA curb ramps at the Great Oaks Boulevard/Via Del Oro intersection, the project will be required to provide a contribution towards the signal improvements including PTZ cameras at the Via Del Oro/San Ignacio Ave and Via Del Oro/Great Oaks Blvd intersections to improve the pedestrian network in the project vicinity.

The implementation of the Tier 2 mitigation measures described above would reduce the VMT generated by the project to 14.34 per employee, which is less than the established impact threshold of 14.37 VMT per employee for industrial employment uses.

### **Cumulative (GP Consistency) Evaluation**

Projects must demonstrate consistency with the *Envision San José 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's goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required per the City's *Transportation Analysis Handbook*.

According to the *Envision San Jose 2040 General Plan*, approximately half of the project site is designated for *industrial park* uses, and the remaining portion of the site is designated for *transit employment center* uses. The industrial park designation is an industrial designation intended for a wide variety of industrial users such as research and development, manufacturing, assembly, testing, and offices. The transit employment center designation is applied to areas planned for intensive job growth because of their importance as employment districts to the City and a high degree of access to transit and other facilities and services.

Since both the *industrial park* and *transit employment center* designations allow employment uses, the proposed data center project is consistent with the *Envision San Jose 2040 General Plan* and would not require a General Plan Amendment (GPA). 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.

### **Local Transportation Analysis**

The intersection operations analysis completed as part of the LTA is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

### **Trip Generation**

After applying the ITE trip rates and appropriate trip reduction to the proposed project, it is estimated that the proposed project would generate 515 daily vehicle trips, with 57 trips (31 inbound and 26 outbound) occurring during the AM peak hour and 46 trips (14 inbound and 32 outbound) occurring during the PM peak hour.

### **Recommended Site Access and On-Site Circulation Improvements**

The following improvements are recommended to improve access to the project site and on-site circulation:

- The northern and southern driveways on San Ignacio Avenue that provide ingress/egress to service fuel roads should be gated and restricted to Emergency Vehicle Access (EVA) only because the centrally located middle driveway would be adequate to serve as an access to the service fuel roads to/from San Ignacio Avenue.
- The site design should ensure design features, in particular, the landscaping and signage along the project site frontage and at the project site driveways, would not interfere with the sight distance at the proposed site driveway.
- The project should abide by the City of San Jose standard driveway cut and curb radii for the driveway along Via Del Oro. Additionally, the security gate at the Via Del Oro project driveway

should be relocated to at least 65 feet from the back of the sidewalk to accommodate trucking queuing at the gate waiting to enter the project site and not block the sidewalk.

## **Parking Supply**

### **Vehicular Parking**

Based on the City's parking requirements, the project is required to provide 180 and 84 off-street vehicle parking spaces for the office and data center uses, respectively. The proposed 266 vehicle parking spaces on-site would exceed the required 264 parking spaces based on the City's requirements.

Based on the information provided by the applicant, each of the three buildings would have eight employees and up to seven visitors during the standard day shift, three employees and two visitors during the mid-day shift, and three employees and one visitor during the night shift for a total of 42 employees and 30 visitors per day for all three buildings. The parking demand would be the greatest during the day shift with at most 45 vehicles from employees and visitors for all three buildings. Therefore, the City's parking requirement of 264 spaces is substantially more than the project's peak parking demand. The City should consider allowing the project to provide fewer parking spaces than the standard requirement due to the low number of anticipated employees and visitors. The project applicant should coordinate with the City's Planning Department to decide if the project should be subject to different parking requirement standards due to the low number of employees/visitors.

### **Bicycle Parking**

Based on the City's bicycle parking requirements, the project is required to provide nine bicycle parking spaces each for the office and data center uses. The provided 21 bicycle parking spaces on-site would be more than the 18 required number of parking spaces based on the City's requirements.

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

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

### **Pedestrian Facilities**

Pedestrian facilities near the project site consist of sidewalks along most of the streets in the project vicinity. Sidewalks are found along both sides of all streets near the project site with the exception of the west side of Santa Teresa Boulevard and the south side of the Santa Teresa Light Rail Station driveway from Via Del Oro. Other pedestrian facilities in the project area include crosswalks and pedestrian push buttons at all signalized intersections in the project vicinity.

Pedestrian generators in the project vicinity include retail centers on Bernal Road near San Ignacio Avenue and Santa Teresa Boulevard and the Santa Teresa LRT Station located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Existing sidewalks along Great Oaks Boulevard, Via Del Oro, and San Ignacio Avenue provide pedestrian connections between the project site and pedestrian destinations in the project vicinity.

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

### **Bicycle Facilities**

There are several bike facilities in the immediate vicinity of the project site. The bikeways within the vicinity of the project site would remain unchanged under project conditions. There are bike lanes provided along Great Oaks Boulevard and San Ignacio Avenue, including the segment along the project's frontages.

The San Jose Better Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

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

- Via Del Oro, along its entire length

#### **Class IV protected bike lanes are planned for:**

- San Ignacio Avenue, between Bernal Road and Santa Teresa Boulevard
- Great Oaks Boulevard, along its entire length
- Santa Teresa Boulevard, along its entire length
- Bernal Road, between Heaton Moor Drive and Hellyer Avenue
- Santa Teresa LRT Station access road, along its entire length

As previously described, the City's General Plan identifies the bicycle commute mode split target as 15 percent or more by the year 2040. This calculates to at most approximately nine bicycle trips during the peak hours. This level of bicycle mode share is a reasonable goal for the project.

### **Transit Services**

Existing transit services in the study area are provided by VTA and Caltrain. The Santa Teresa LRT Station is located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Bus stops for Local Route 42 and Frequent Route 68 are located within walking from the project site on San Ignacio Avenue and Santa Teresa Boulevard, respectively. The new transit trips generated by the project are not expected to create demand in excess of the transit service capacity that is currently provided.

# 1. Introduction

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This report presents the results of a Transportation Analysis (TA) for the proposed data center development located along Via Del Oro in the City of San Jose. The project site is bounded by Via Del Oro to the north, San Ignacio Avenue to the west, Great Oaks Boulevard to the east, and vacant land to the south. The proposed project consists of the construction of three two-story data center buildings that will each be approximately 182,350 square feet (s.f.) in size for a total of 547,050 s.f. of building space. Primary access to the project site would be provided via a full access driveway along Great Oaks Boulevard. The site also will be served by one service driveway along Via Del Oro and three along San Ignacio Avenue. The project site location is shown in Figure 1, and the site plan is shown in Figure 2.

## Scope of Work

The transportation analysis of the project was evaluated following the standards and methodologies set forth in the City of San Jose's Transportation Analysis Policy (Council Policy 5-1), the City of San Jose *Transportation Analysis Handbook 2018*, and by the California Environmental Quality Act (CEQA). Per the requirements of the City of San Jose's Transportation Policy and *Transportation Analysis Handbook 2018*, the TA report for the project consists of a CEQA vehicle-miles-traveled (VMT) analysis and a supplemental Local Transportation Analysis (LTA).

## Transportation Policies

### Council Policy 5-1

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

In adherence to SB 743, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The policy replaces its predecessor (Policy 5-3) and establishes the thresholds for transportation impacts under the CEQA based on vehicle miles traveled (VMT) instead of level of service (LOS). This change intends to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses. The new transportation policy aligns with the currently adopted General Plan which seeks to focus on new development growth within planned growth areas, bringing together office, residential, and supporting service land uses to internalize



Figure 1  
Site Location

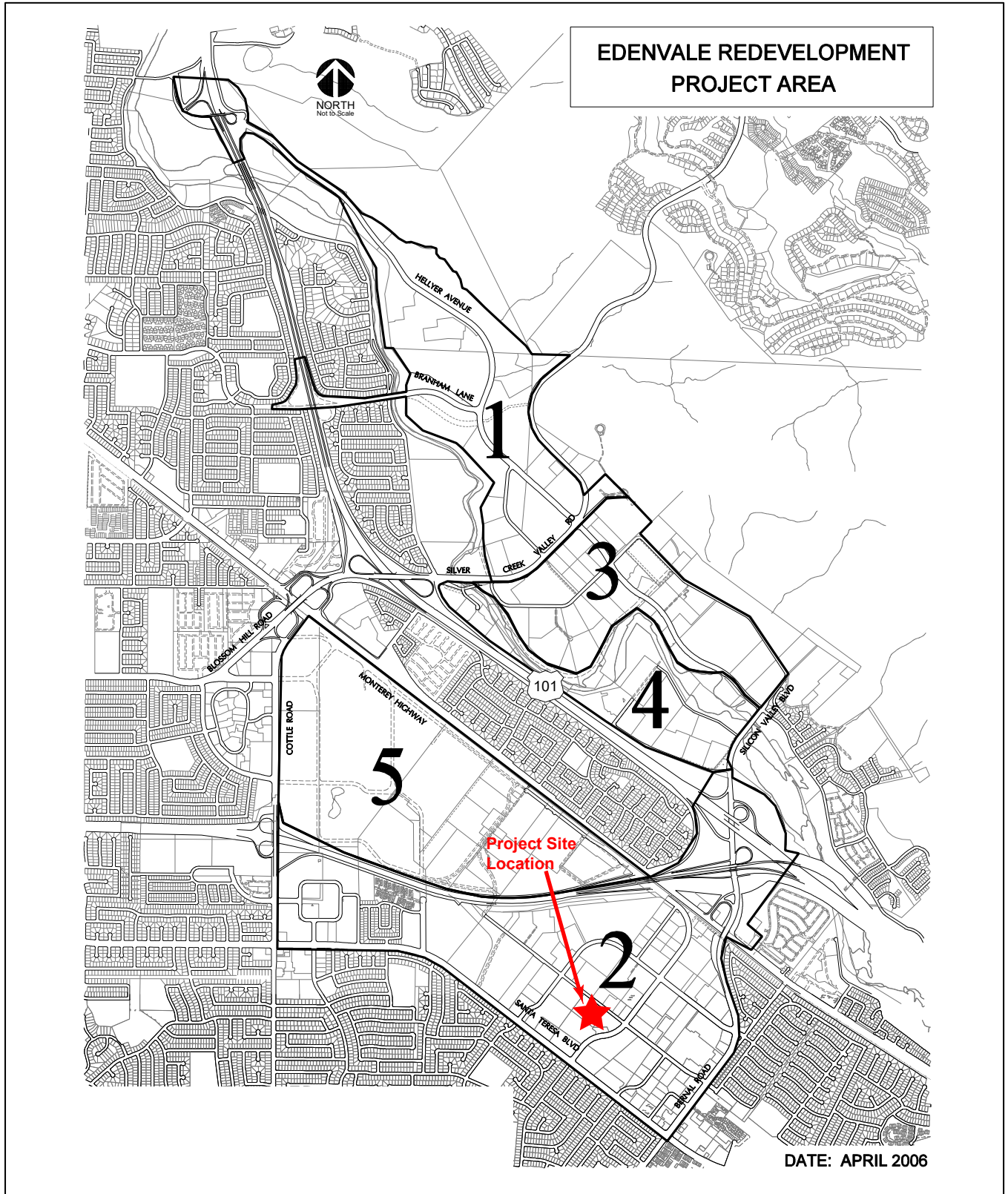
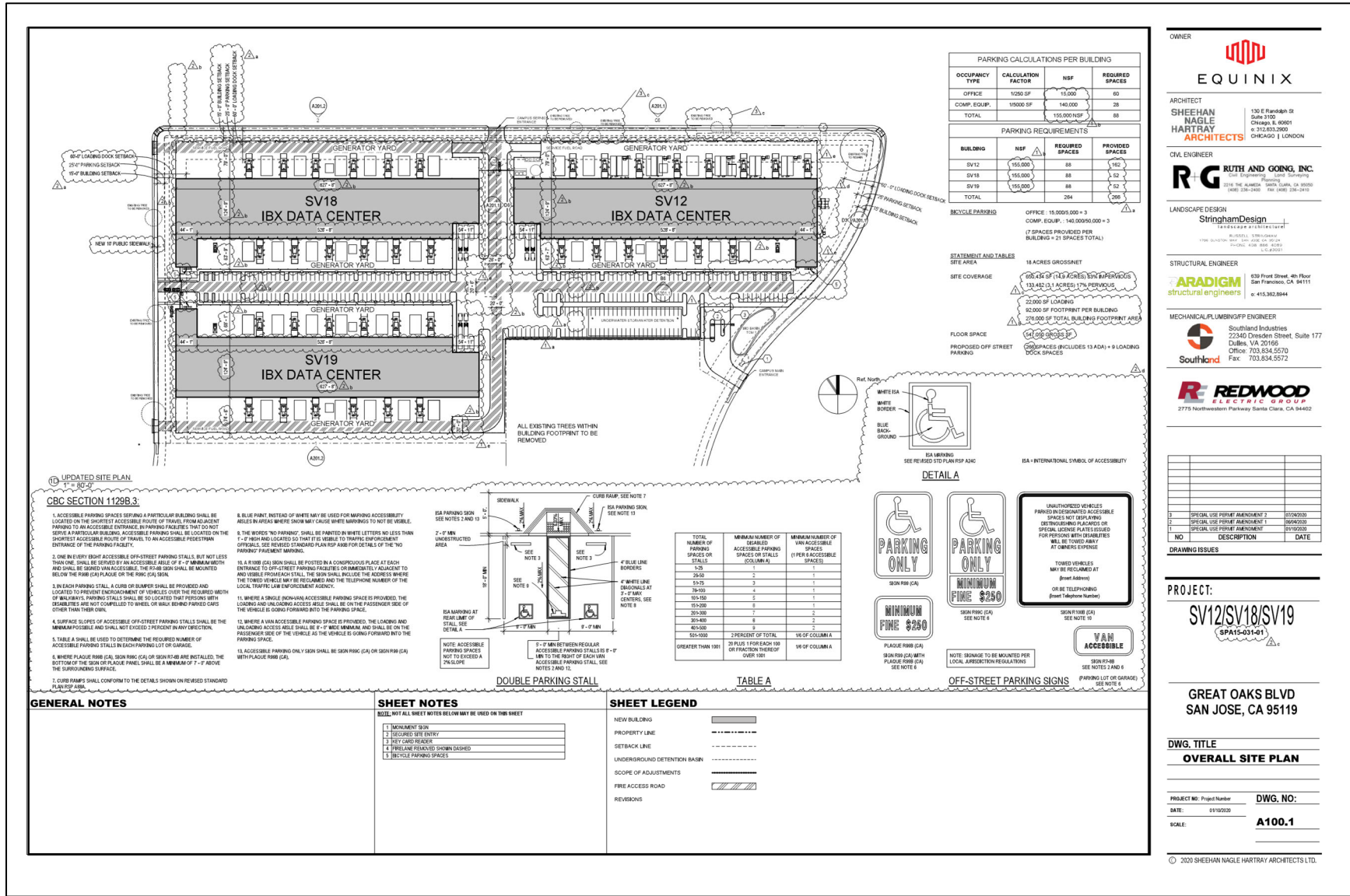


Figure 2  
Proposed Site Plan



trips and reduce VMT. All new development projects are required to analyze transportation impacts using the VMT metric and conform to Council Policy 5-1.

### **Edenvale Area Development Policy**

The project site is located within Area 2 of the Edenvale Area Development Policy (EADP) area. The Edenvale area in south San Jose is a geographic area that was adopted in 2000 by the City of San Jose for an Area Development Policy in conformance with the provisions of the City of San Jose General Plan Policy TR-5.3. According to the Edenvale Area Development Policy, updated in April 2014, the Edenvale area is subdivided into three areas: “Edenvale Area”, “New Edenvale”, and “Mixed-Use Development Area”. The “Edenvale Area”, which is generally east of US 101 between Hellyer Avenue and Silicon Valley Boulevard, is designated for Industrial Park/R&D/office land uses. The “New Edenvale” area, which is generally bounded to the east by Santa Teresa Boulevard, to the west by SR 85, to the north by Cottle Road, and to the south by Bernal Road, is designated for Industrial Park/R&D/office land uses. The “Mixed-Use Development Area”, which is generally west of Monterey Highway between Cottle Road and SR 85, is designated for retail, office, and residential land uses.

City staff has determined that the project is not subject to pay the EADP traffic impact fee (TIF) due to its location in Area 2.

### **General Plan Goals & Policies**

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

- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- 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 the improvement of biking, walking, and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- 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);
- 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. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities (TR-3.3);
- 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 Villages and Corridors and other growth areas (TR-8.6);
- Encourage private property owners to share their underutilized parking supplies with the general public and/or other adjacent private developments (TR-8.7);



- 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);
- 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 CEQA transportation analysis for the project consists of a project-level VMT impact analysis using the City's VMT tool and a cumulative impact analysis that demonstrates the project's consistency with the Envision San Jose 2040 General Plan.

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 development projects. For non-residential or non-office projects, very large projects, or projects that can potentially shift travel patterns, the City's Travel Demand Forecasting (TDF) model can be used to determine project VMT. The City's VMT tool was used to estimate VMT for employment uses proposed by the project.

The City of San Jose's Transportation Analysis Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required. The project site is located within the planned EADP growth area. However, the proposed project will not meet all applicable VMT screening criteria as described in further detail in Chapter 3. Therefore, a CEQA-level transportation analysis that evaluates the project's effects on VMT is required and is presented in Chapter 3.

### **Local Transportation Analysis Scope**

A local transportation analysis (LTA) supplements the CEQA VMT analysis and identifies transportation and traffic operational issues that may arise due to a development project. The LTA includes an evaluation of the effects of the project on transportation, site access and circulation, and related safety elements in the proximate area of the project. The LTA typically also includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. However, since the proposed project uses are consistent with the EADP, City staff has concluded that the project does not require preparation of a comprehensive Local Transportation Analysis (LTA) that includes an evaluation of peak hour intersection level of service analysis.

The Public Works Department has indicated, however, that a limited review of traffic operations on the roadway network in the immediate project area and a review of site access and on-site circulation is

required to identify potential operational issues that could occur as a result of the proposed project. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

## **Report Organization**

The remainder of this report is divided into four chapters. Chapter 2 describes the existing transportation system including the existing roadway network, transit service, bicycle, and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including VMT analysis methodology, baseline and potential project VMT impacts, and potential cumulative transportation impacts. Chapter 4 describes the LTA including the method by which project traffic is estimated, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking. Chapter 5 presents the conclusions of the transportation analysis.

## 2. Existing Transportation Setting

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This chapter describes the existing conditions of the transportation system within the study area of the project. It describes transportation facilities in the vicinity of the project site, including the roadway network, transit services, and pedestrian and bicycle facilities.

### Existing Roadway Network

Regional access to the project site is provided by US 101 and SR 85. Local site access is provided by Great Oaks Boulevard, San Ignacio Avenue, Via Del Oro, Santa Teresa Boulevard, and Bernal Road. These facilities are described below.

**US 101** is an eight-lane (three mixed-flow lanes and one HOV lane in each direction) north-south freeway in the project vicinity. It extends north through San Francisco and south through Gilroy. Regional access to the project site is provided via its interchange with Bernal Road.

**SR 85** is a predominantly north-south freeway that is oriented in an east-west direction in the project vicinity. It extends from Mountain View to US 101 in south San Jose. SR 85 is a six-lane freeway with four mixed-flow lanes and two HOV lanes. It connects to I-280, SR 17, SR 87, and US 101. Regional access to the project site is provided via its ramps at Great Oaks Boulevard.

**Great Oaks Boulevard** is a four-lane east-west divided roadway designated as a City Connector Street in the General Plan with a posted speed limit of 40 mph in the project vicinity. South of Santa Teresa Boulevard, this roadway is designated as Vineyard Drive. Direct access to the project site would be provided via a full-access driveway along Great Oaks Boulevard.

**San Ignacio Avenue** is a two-lane east-west local roadway with a two-way center left-turn lane with a posted speed limit of 35 mph between Santa Teresa Boulevard and Great Oaks Boulevard. San Ignacio Avenue is a 4-lane divided roadway designated as a City Connector Street in the General Plan between Great Oaks Boulevard and Bernal Road with a posted speed limit of 40 mph. Access to the project site is provided via its intersections with Great Oaks Boulevard and Santa Teresa Boulevard.

**Via Del Oro** is a two-lane north-south local roadway with a two-way center left-turn lane. Via Del Oro has a posted speed limit of 35 mph. Via Del Oro intersects Bernal Road, Great Oaks Boulevard, and San Ignacio Avenue. Via Del Oro provides direct access to the project site via a single service driveway.

**Santa Teresa Boulevard** is a six-lane north-south divided roadway designated as a City Connector Street in the General Plan with a posted speed limit of 45 mph in the project vicinity. Santa Teresa Boulevard extends from SR 85 near Oakridge Shopping Mall to Morgan Hill, where it transitions into Hale Avenue. Access to the project site is provided via its intersection with Great Oaks Boulevard.

**Bernal Road** is a six-lane east-west divided roadway designated as a City Connector Street in the General Plan that intersects US 101, SR 85, Monterey Road, San Ignacio Avenue, Via del Oro, and Santa Teresa Boulevard. Bernal Road has a posted speed limit of 40 mph. East of US 101, Bernal Road changes designation to Silicon Valley Boulevard. Access to the project site is provided via its intersections with San Ignacio Avenue and Via Del Oro.

## 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

Pedestrian facilities near the project site consist mostly of sidewalks along the streets in the project vicinity. Sidewalks are found along both sides of all streets near the project site with the exception of the west side of Santa Teresa Boulevard and the south side of the Santa Teresa LRT Station driveway from Via Del Oro. Other pedestrian facilities in the project area include crosswalks and pedestrian push buttons at all signalized intersections in the project vicinity.

Pedestrian generators in the project vicinity include retail centers along Bernal Road near San Ignacio Avenue and Santa Teresa Boulevard and the Santa Teresa Light Rail Transit Station. Existing sidewalks along San Ignacio Avenue, Via Del Oro, Great Oaks Boulevard, and Santa Teresa Boulevard provide pedestrian connections between the project site and pedestrian destinations in the project vicinity.

Overall, the existing network of sidewalks and crosswalks provides good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the area. The existing pedestrian facilities are shown in Figure 3.

### Existing Bicycle Facilities

**Class I Bikeway (Trail or Path)** is an off-street trail or path with exclusive right-of-way for nonmotorized transportation used for commuting as well as recreation. The Coyote Creek Trail is one of the longest trail systems extending from the Bay to the City's southern boundary. The northern portion of the trail system runs from SR 237 to Montague Expressway. A short downtown portion travels through Selma Olinder Park. The southern portion begins at Tully Road and extends southward through county jurisdiction and reaches Morgan Hill. The nearest trail access points from the project site are located approximately one mile away near the US 101/Bernal Road interchange and Monterey Road/Menard Drive intersection.

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

- San Ignacio Avenue, between Bernal Road and Santa Teresa Boulevard
- Bernal Road, between Harry Road and San Ignacio Avenue
- Santa Teresa Boulevard, along its entire length
- Monterey Road, on the east side along its entire length
- Great Oaks Boulevard, along its entire length
- Raleigh Road, along its entire length



**Figure 3**  
**Existing Pedestrian Facilities**



**Class III Bikeway (Bike Route).** Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. In the vicinity of the project site, San Ignacio Avenue, between Santa Teresa Boulevard and Endmoor Drive, is designated as a bike route.

Although most of the residential streets near the project site do not provide bike lanes or are designated as bike routes, due to their low traffic volumes, many of them are conducive to bicycle usage. The existing bicycle facilities in the vicinity of the project site are shown in Figure 4.

### **Existing Transit Services**

Existing transit services to the study area are provided by the Santa Clara Valley Transportation Authority (VTA) and Caltrain. The Santa Teresa Light Rail Transit (LRT) Station is located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. The project site also is located approximately 1.5 miles from the Blossom Hill Caltrain Station at Ford Road. Connection between the Santa Teresa LRT Station and the Blossom Hill Caltrain Station is provided by Frequent Bus Route 68. These transit services are described below. The transit stations and VTA bus routes within walking distance of the project site are shown in Figure 5.

#### **VTA Bus Services**

Local Route 42 provides services between the Santa Teresa Light Rail Station and Evergreen Valley College from 6:00 AM to 7:00 PM on weekdays. Local Route 42 operates along Via Del Oro, San Ignacio Road, Bernal Road, and Silicon Valley Boulevard, with 60-minute headways during the commute periods. The nearest bus stops are located near the intersection of San Ignacio Avenue and Great Oaks Boulevard.

Frequent Route 68 provides service between the San Jose Diridon Station and the Gilroy Transit Center from 5:00 AM to 12:30 AM on weekdays. Frequent Route 68 operates along Santa Teresa Boulevard with 20-minute headways during the commute periods. The nearest bus stops are located near the intersection of Santa Teresa Boulevard and Great Oaks Boulevard.

#### **VTA LRT Services**

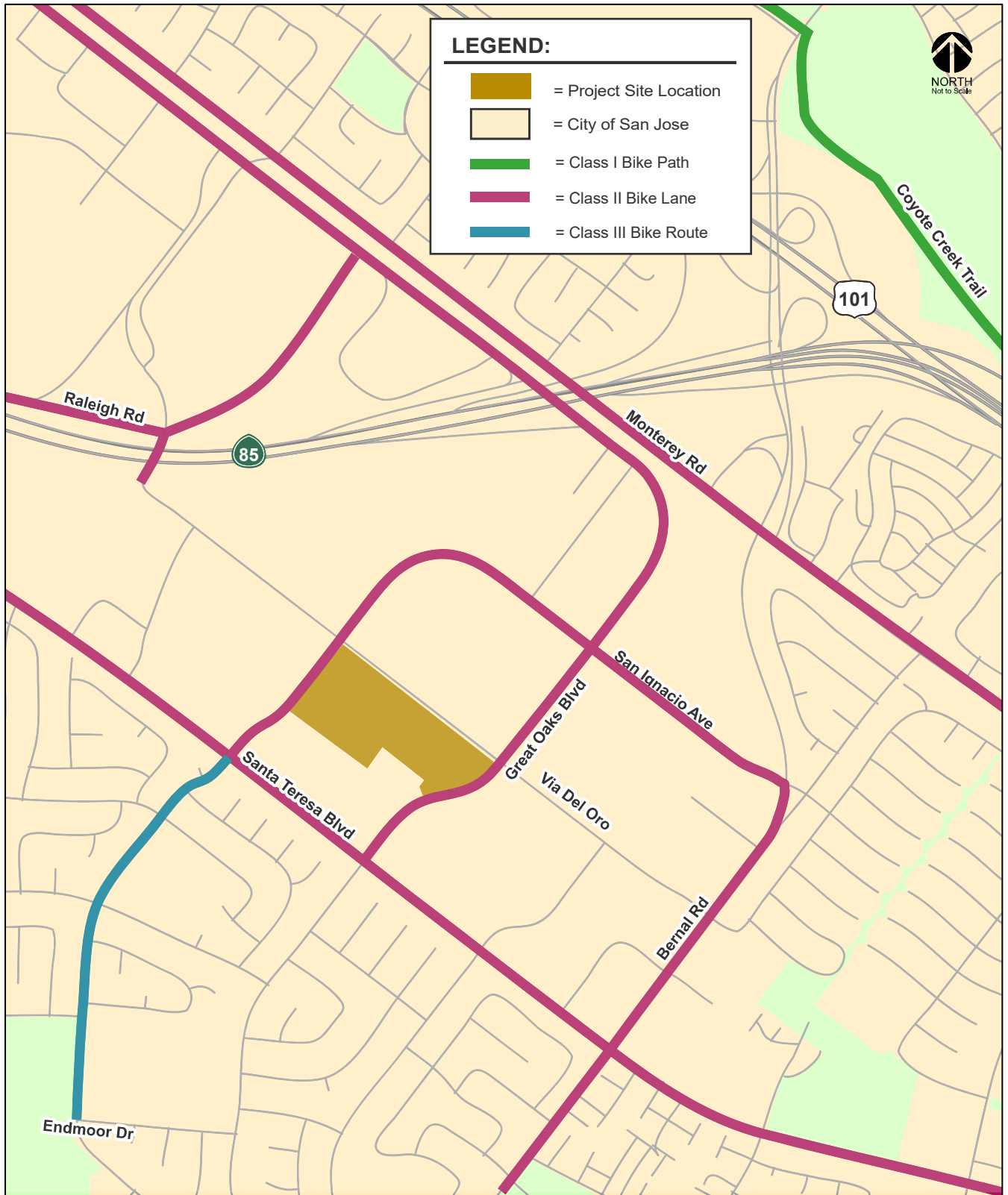
The Blue Line provides service between the Santa Teresa LRT Station and the Baypointe Station from 5:00 AM and 1:00 AM on weekdays with 20-minute headways during the commute periods. The Santa Teresa LRT Station is located approximately 0.5 miles north of the project site. The Santa Teresa LRT Station is served by bus routes 42, 68, and 102.

#### **Caltrain Services**

Commuter rail service between San Francisco and Gilroy is provided by Caltrain. The Blossom Hill Caltrain Station is located at the Monterey Road/Ford Road intersection, approximately 1.5 miles north of the project site. A pedestrian bridge to access the station is provided between Great Oaks Boulevard and Monterey Road. The associated Park-and-Ride lot is located on the southeast corner of the intersection of Monterey Road and Ford Road. The Blossom Hill Caltrain Station is served by two northbound trains in the morning commute period with 30-minute headway and two southbound trains in the evening commute period with 90-minute headway.



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



**Figure 5**  
**Existing Transit Services**





## Existing Intersection Volumes and Levels of Service

### Existing Intersection Volumes

Existing peak hour traffic volumes at intersections were obtained from the City of San Jose. Due to the current COVID-19 pandemic situation and its effect on traffic patterns, the City of San Jose is requiring that all new traffic counts be put on hold until further notice. Therefore, as recommended by the City of San Jose staff, a 1% compounded annual growth factor was applied to traffic counts that are older than two years to estimate traffic conditions in 2020. The existing volumes are tabulated in Appendix B.

### Existing Intersection Levels of Service

The results of the level of service analysis (see Table 1) show that all intersections in the immediate project vicinity are currently operating at acceptable levels of service under existing conditions during both the AM and PM peak hours based on the City of San Jose standards. The intersection level of service calculation sheets are included in Appendix C.

**Table 1**  
**Existing Intersection Levels of Service in the Project Vicinity**

Int. #	Intersection	LOS Standard	Peak Hour	Count Date	Avg. Delay	LOS
1	Santa Teresa Boulevard and Great Oaks Boulevard	D	AM	10/22/15	24.6	C
			PM	10/22/15	21.4	C
2	Santa Teresa Boulevard and San Ignacio Avenue	D	AM	10/26/16	27.9	C
			PM	10/26/16	22.8	C
3	Via Del Oro and Great Oaks Boulevard	D	AM	10/26/16	14.3	B
			PM	10/26/16	19.5	B
4	Via Del Oro and San Ignacio Avenue	D	AM	10/27/15	11.8	B
			PM	10/27/15	20.5	C

### 3.

## CEQA Transportation Analysis

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This chapter describes the CEQA transportation analysis, including the VMT analysis methodology and significance criteria, potential project impacts on VMT, mitigation measures recommended to reduce significant impacts, and an evaluation of consistency with the City of San Jose's General Plan.

### CEQA Transportation Analysis Screening Criteria

The City of San Jose *Transportation Analysis Handbook* identifies screening criteria that determine whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project or a component of a mixed-use project meets the City's screening criteria, it is presumed that the project would result in a less-than-significant transportation impact and a detailed VMT analysis is not required. The type of development projects that may meet the screening criteria include the following:

- (1) small infill projects
- (2) local-serving retail
- (3) local-serving public facilities
- (4) projects located in *Planned Growth Areas* with low VMT and *High-Quality Transit*
- (5) deed-restricted affordable housing located in *Planned Growth Areas* with *High-Quality Transit*

Table 2 summarizes the screening criteria for each type of development project as identified in the City of San Jose Transportation Analysis Handbook. Figures 6 and 7 identify areas within the City that currently have low VMT levels estimated by the City for residents and industrial workers, respectively, for which transit-supportive development located within a priority growth area would be screened out of the evaluation of VMT.

### Evaluation of Screening Criteria

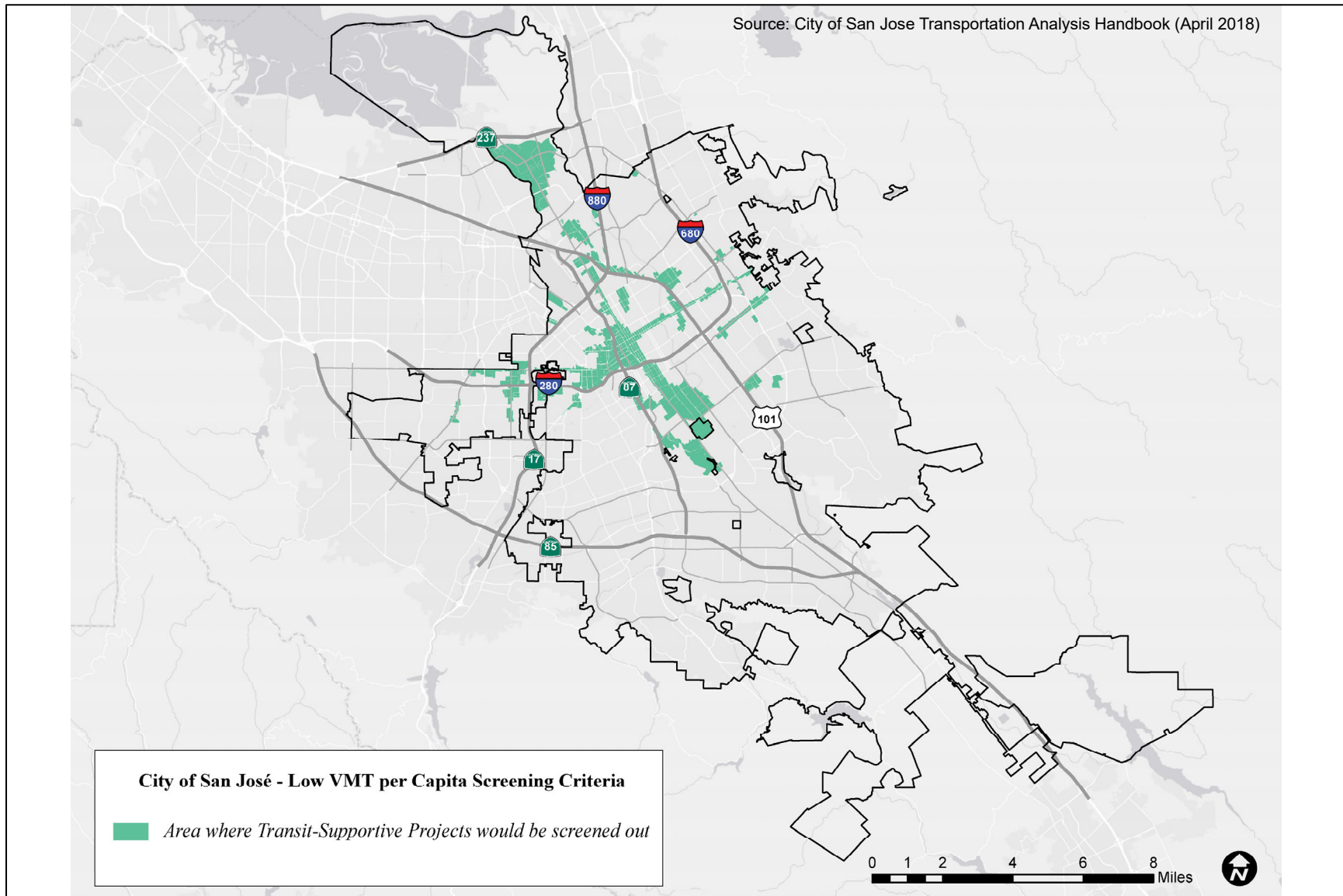
The City does not provide screening criteria specific to data center land uses. However, per the City of San Jose VMT screening criteria, industrial uses of 30,000 square feet or less are considered small infill projects and do not require a CEQA VMT evaluation since the VMT generated by such a small project would likely not result in a significant impact to VMT. Data center uses are similar to light industrial uses since both land uses have an emphasis on activities other than manufacturing and typically have minimal office space. Therefore, the number and origination/destination of daily trips generated by both light industrial and data center uses should be similar.

**Table 2**  
**CEQA VMT Analysis Screening Criteria for Development Projects**

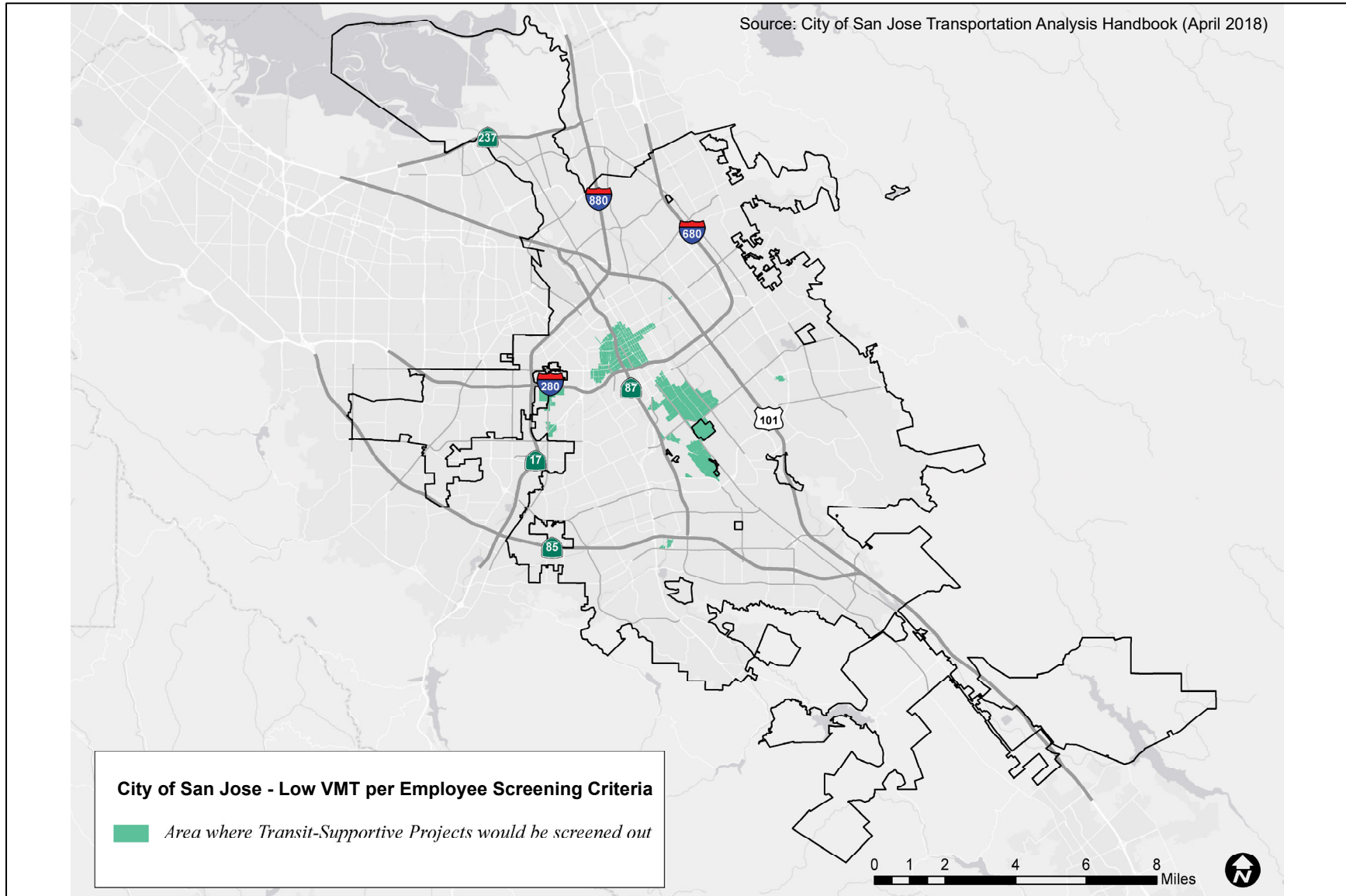
Type	Screening Criteria
<b>Small Infill Projects</b>	<ul style="list-style-type: none"> <li>• Single-family detached housing of 15 units or less; <u>OR</u></li> <li>• Single-family attached or multi-family housing of 25 units or less; <u>OR</u></li> <li>• Office of 10,000 square feet of gross floor area or less; <u>OR</u></li> <li>• Industrial of 30,000 square feet of gross floor area or less</li> </ul>
<b>Local-Serving Retail</b>	<ul style="list-style-type: none"> <li>• 100,000 square feet of total gross floor area or less without drive-through operations</li> </ul>
<b>Local-Serving Public Facilities</b>	<ul style="list-style-type: none"> <li>• Local-serving public facilities</li> </ul>
<b>Residential/Office Projects or Components</b>	<ul style="list-style-type: none"> <li>• <b>Planned Growth Areas:</b> Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; <u>AND</u></li> <li>• <b>High-Quality Transit:</b> Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor; <u>AND</u></li> <li>• <b>Low VMT:</b> Located in an area in which the per capita VMT is less than or equal to the CEQA significance threshold for the land use; <u>AND</u></li> <li>• <b>Transit-Supporting Project Density:</b> <ul style="list-style-type: none"> <li>○ Minimum Gross Floor Area Ratio (FAR) of 0.75 for office projects or components;</li> <li>○ Minimum of 35 units per acre for residential projects or components;</li> <li>○ If located in a Planned Growth Area that has a maximum density below 0.75 FAR or 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; <u>AND</u></li> </ul> </li> <li>• <b>Parking:</b> <ul style="list-style-type: none"> <li>○ No more than the minimum number of parking spaces required;</li> <li>○ 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; <u>AND</u></li> </ul> </li> <li>• <b>Active Transportation:</b> Not negatively impact transit, bike or pedestrian infrastructure.</li> </ul>
<b>Restricted Affordable Residential Projects or Components</b>	<ul style="list-style-type: none"> <li>• <b>Affordability:</b> 100% restricted affordable units, excluding unrestricted manager units; affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes; <u>AND</u></li> <li>• <b>Planned Growth Areas:</b> Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; <u>AND</u></li> <li>• <b>High Quality Transit:</b> Located within ½ a mile of an existing major transit stop or an existing stop along a high quality transit corridor; <u>AND</u></li> <li>• <b>Transit-Supportive Project Density:</b> <ul style="list-style-type: none"> <li>○ Minimum of 35 units per acre for residential projects or components;</li> <li>○ If located in a Planned Growth Area that has a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; <u>AND</u></li> </ul> </li> <li>• <b>Transportation Demand Management (TDM):</b> If located in an area in which the per capita VMT is higher than the CEQA significance threshold, a robust TDM plan must be included; <u>AND</u></li> <li>• <b>Parking:</b> <ul style="list-style-type: none"> <li>○ No more than the minimum number of parking spaces required;</li> <li>○ 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; <u>AND</u></li> </ul> </li> <li>• <b>Active Transportation:</b> Not negatively impact transit, bike or pedestrian infrastructure.</li> </ul>

Source: City of San José Transportation Analysis Handbook, April 2018.

**Figure 6**  
**Low VMT per Capita Areas in San Jose**



**Figure 7**  
**Low VMT per Employee Areas in San Jose**



Presuming that data center uses have similar trip generating characteristics as industrial uses, data center uses can be converted to an equivalent amount of industrial space based on estimates of daily trips. The conversion of the proposed data center was converted to an equivalent amount of industrial space based on trip generation estimates derived utilizing trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10<sup>th</sup> Edition* (2017). Based on the ITE daily trip rate for data center uses (ITE Land Use Code 160), the proposed 547,050-s.f. data center is estimated to generate 542 daily trips, which is equivalent to the daily trips estimated to be generated by approximately 109,000 s.f. of industrial space. Table 3 presents the industrial space equivalency calculation. The 109,000 s.f. of equivalent industrial space for the proposed project would exceed the City's small industrial infill project criterion of 30,000 s.f.. Therefore, the proposed project would not meet the screening criterion for VMT analysis exemption.

**Table 3**  
**Equivalent Industrial Space**

Land Use	Size	Daily	
		Rate	Trip
Data Center (ITE #160)	547,050 Square Feet	0.99	542
General Light Industrial (ITE #110)	<b>Equivalent Industrial Space = 109,000 Square Feet</b>	4.96	542
Source: ITE Trip Generation Manual, 10 <sup>th</sup> Edition 2017			

## VMT Evaluation Methodology and Criteria

Per Council Policy 5-1, the effects of the proposed project on VMT were evaluated using the methodology outlined in the City's *Transportation Analysis Handbook*. The City of San Jose defines VMT as the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT is calculated using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle-trips with one end within the project. A project's VMT is compared to established thresholds of significance based on the project location and type of development.

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 serve in the project vicinity.

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. Non-residential and non-employment uses, such as retail and hotel uses are assessed based on their effects on total VMT.

### VMT Evaluation Tool

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 development projects.



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

Since the VMT tool is not capable of evaluating data center land uses and the City has no established thresholds of significance for data center land uses, the proposed data center cannot be evaluated directly using the City's VMT Evaluation Tool. Therefore, to complete the VMT evaluation, the proposed data center space was converted to an equivalent amount of industrial square footage. The project was then evaluated as industrial development in the VMT evaluation tool to obtain project VMT. This is a reasonable approach to the VMT analysis since the majority of trips generated by a data center facility are typically generated by a minimal number of employees and visitors.

Projects located in areas where the existing VMT is greater than 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 greatest 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 VMT 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.

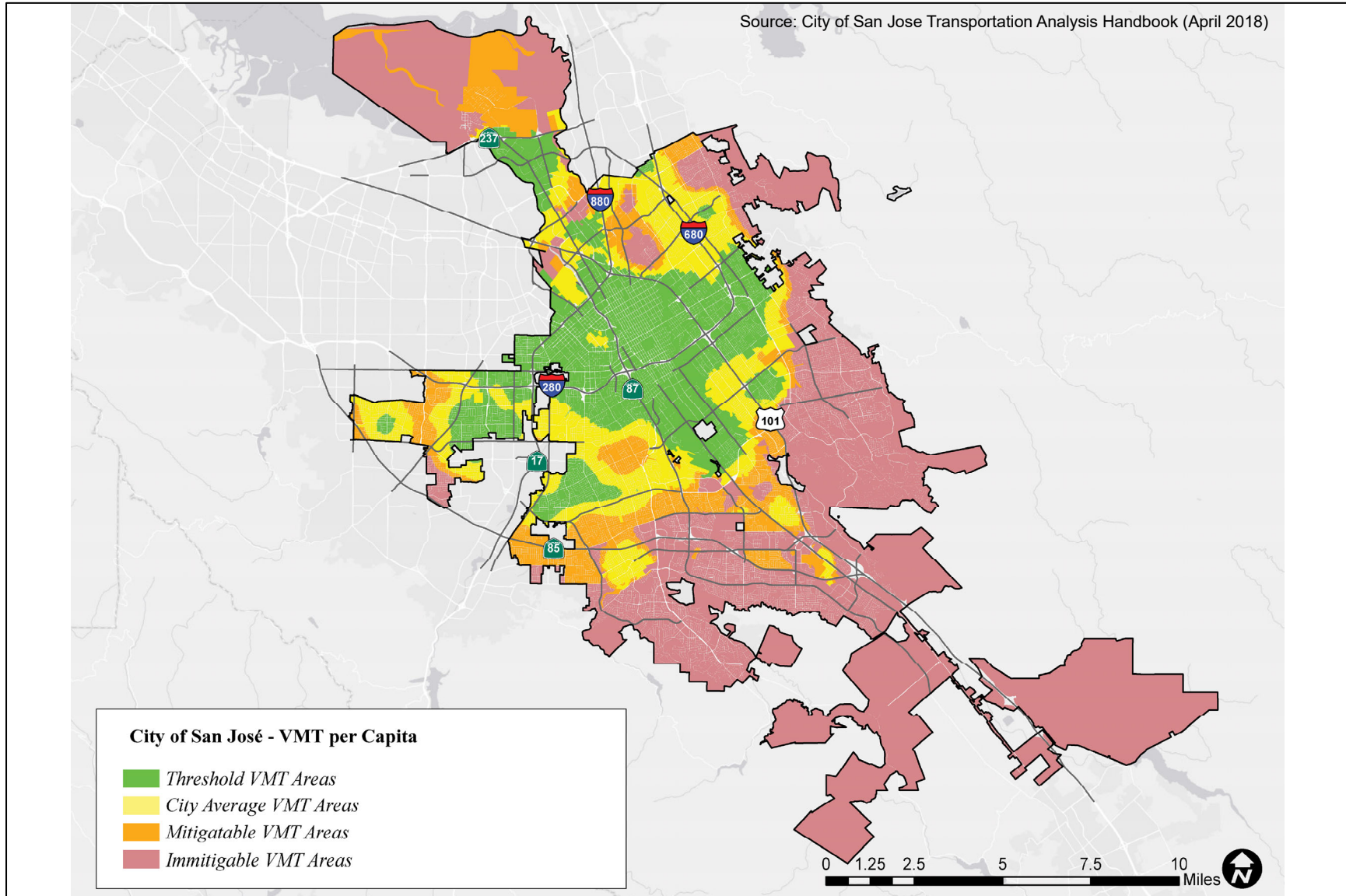
The first three strategies – land use characteristics, multimodal network improvements, and parking – are physical design strategies that can be incorporated into the project design. TDM includes programmatic measures that aim to reduce VMT by decreasing personal motorized vehicle mode share and by encouraging 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.

### **Baseline VMT Estimates**

The thresholds of significance for residential and industrial employment 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 industrial employment uses. Figures 8 and 9 show the current VMT levels estimated by the City for residents and industrial workers, respectively. Areas are color-coded based on the level of existing VMT:

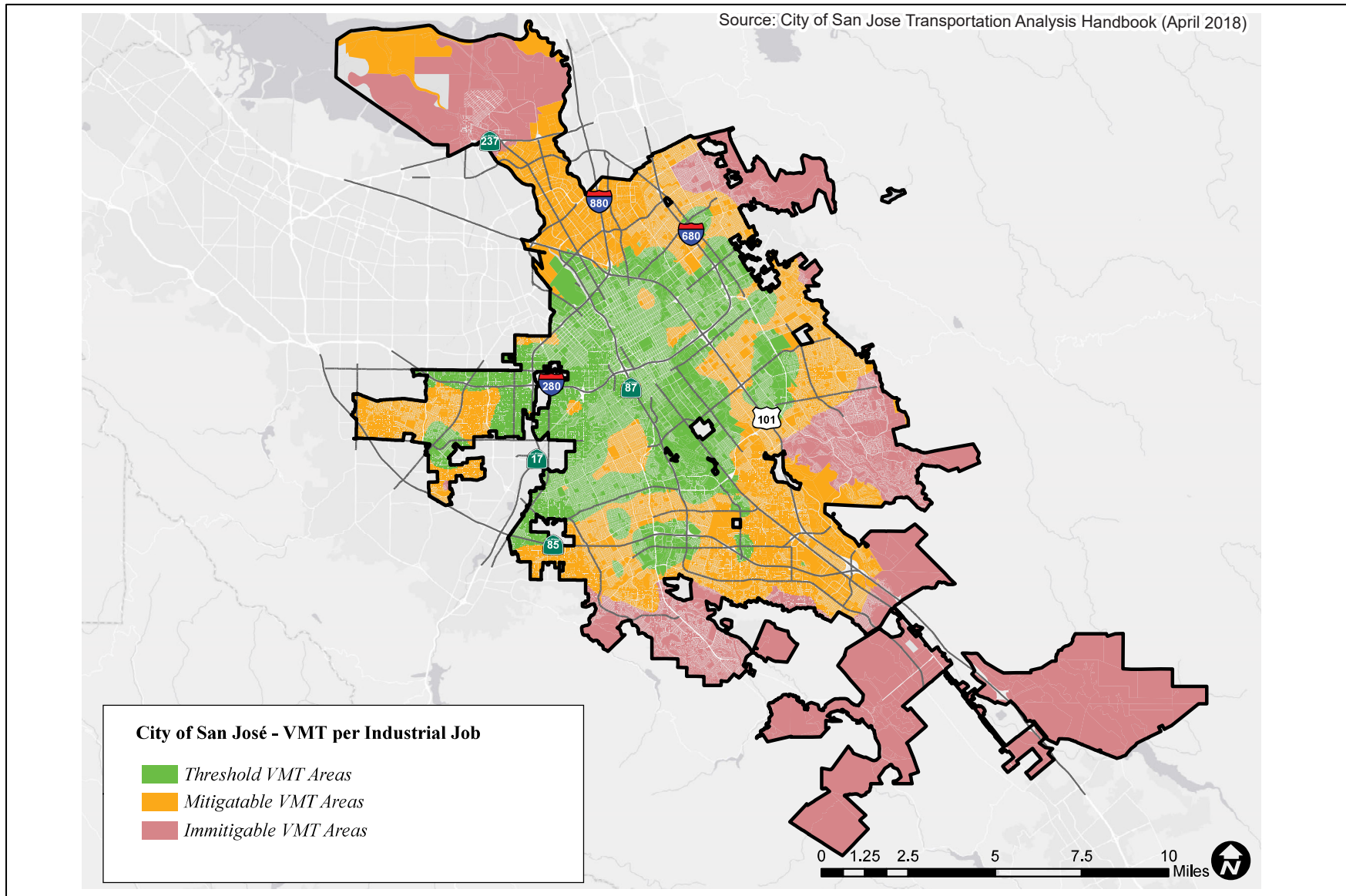
- Green-filled areas are parcels with existing VMT less than the City's residential and employee thresholds of 10.12 VMT per capita and 14.37 per employee.
- Yellow-filled areas are parcels with existing VMT between the residential threshold and the city-wide average of 11.91 VMT per capita.
- Orange-filled areas are parcels with existing VMT greater than the residential and employee thresholds. However, a project's VMT impact may be mitigated by implementing VMT-reducing measures.
- Red-filled areas are parcels with existing VMT greater than the residential and employee threshold. Implementing VMT-reducing measures will not be sufficient to reduce a project's VMT to less than the threshold of significance.

**Figure 8**  
**VMT per Capita Heat Map in San Jose**





**Figure 9**  
**VMT per Industrial Employee Heat Map in San Jose**



Average per-capita and per-employee VMT for all the existing developments within ½ mile buffer of each parcel in the City serves as the baseline from which a project is evaluated. Figure 10 shows the current VMT levels estimated by the City for industrial workers in the immediate project area.

### Thresholds of Significance

If a project is found to have a significant impact on VMT, the impact must be reduced by modifying the project to reduce its VMT to an acceptable level (below the established thresholds of significance applicable to the project) and/or mitigating the impact through multimodal transportation improvements or establishing a Trip Cap. Table 4 shows the VMT thresholds of significance for development projects, as established in the Transportation Analysis Policy. Projects that include industrial uses, such as the proposed project, are said to create a significant adverse impact when the estimated project-generated VMT exceeds the existing regional average VMT per employee of 14.37.

### VMT of Existing Land Uses

The results of the VMT analysis, using the City's VMT Evaluation Tool, indicate that the existing VMT for industrial employment uses in the project vicinity is 14.66 per employee. The current regional average VMT for industrial employment uses is 14.37 per employee. Therefore, the existing VMT levels of industrial employment uses in the project vicinity are currently greater than the regional average VMT.

### Project-Level VMT Impact Analysis

The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the project is projected to generate 14.65 VMT per employee, which would exceed the established impact threshold of 14.37 VMT per employee for industrial employment uses. Therefore, the project would result in an impact on the transportation system based on the City's VMT impact criteria. Figure 11 shows the VMT evaluation summary generated by the City's VMT Evaluation Tool.

### Mitigation Measures

Based on preliminary direction from City staff, the project will be required to implement the following multi-modal facility improvements to reduce the project's VMT impact to less than significant levels. Figure 12 shows the VMT evaluation summary with mitigation generated by the City's VMT Evaluation Tool. Appendix A presents the VMT Evaluation Tool summary report for the project scenarios without and with the mitigation measures.

- Expand the Reach of Bike Access with Investment in Infrastructure (Tier 2 – Bike Access Improvements): Implement bicycle facilities that close gaps in the bicycle network and/or improve the existing bicycle network (e.g. construct barrier or buffer for an existing bike lane). Improving bike access to the project promotes biking as an alternative to driving and reduces VMT. The San Jose Better Bike Plan 2025 identifies Class II bike lanes along Via Del Oro between Bernal Road and Raleigh Road. Additionally, the existing Class II bike lanes along Great Oaks Boulevard, San Ignacio Avenue, and Santa Teresa Boulevard in the project vicinity are planned to be converted to Class IV protected bike lanes. The project will be required to implement Class II bike lanes along Via Del Oro on the opposing side of the project frontage between San Ignacio Avenue and Great Oaks Boulevard. **And**

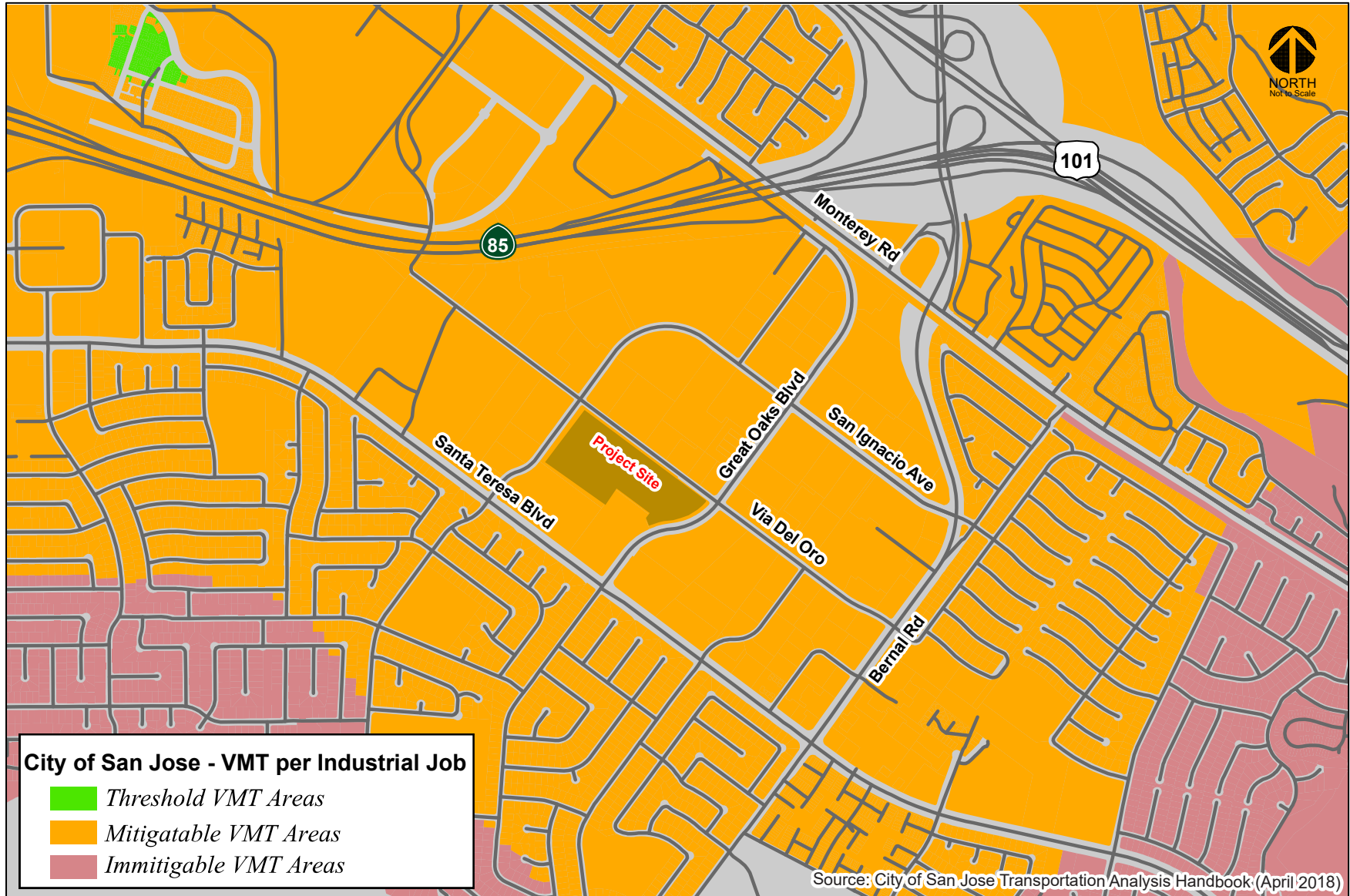
**Table 4**  
**CEQA VMT Analysis Significant Impact Criteria for Development Projects**

Type	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 the 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 or 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 José Transportation Analysis Handbook, April 2018.

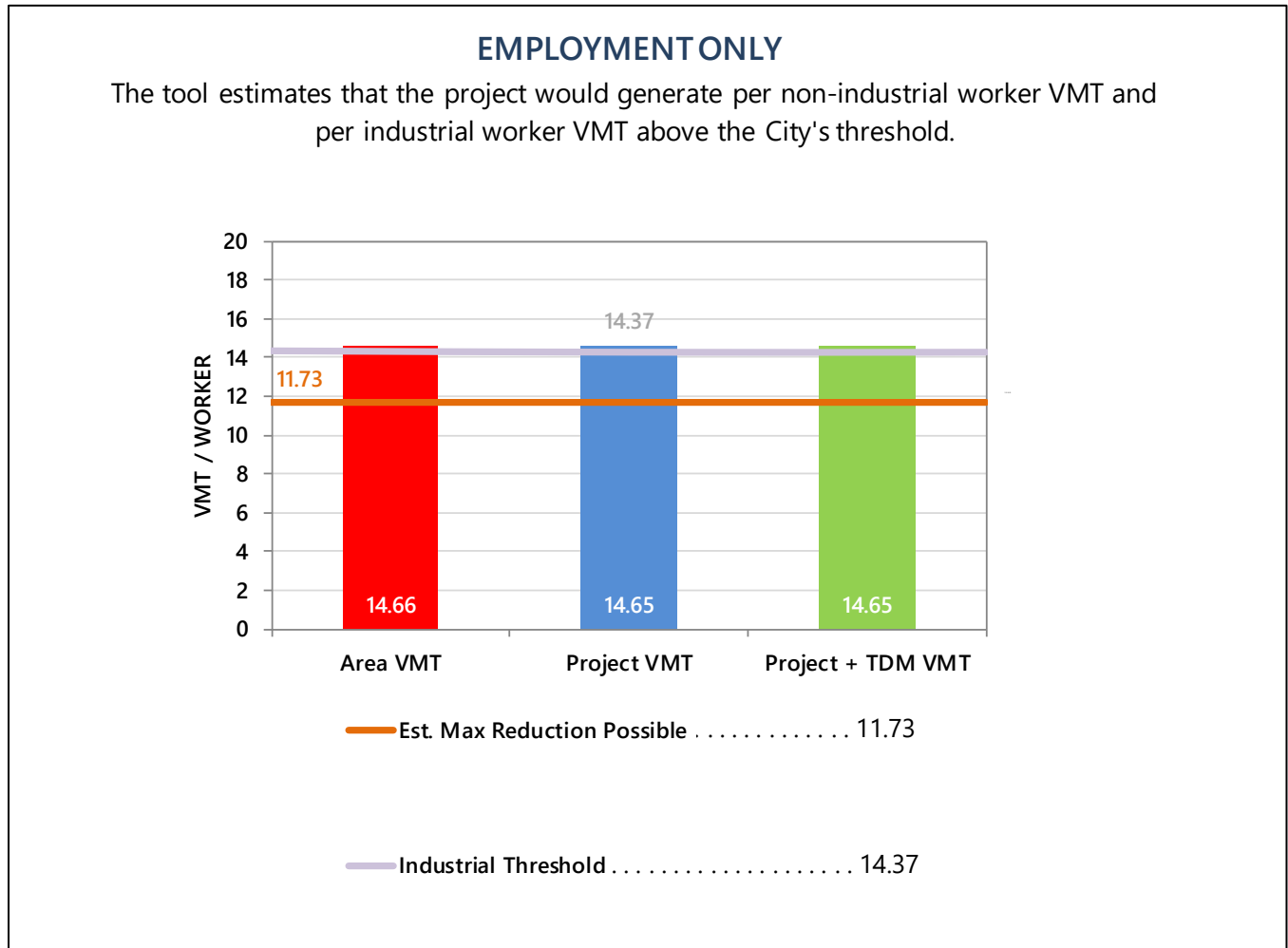
- Provide Pedestrian Network Improvements for Active Transportation (Tier 2 – Pedestrian Access Improvements):** Implement pedestrian improvements both on-site and in the surrounding area. Improving pedestrian connections encourages people to walk instead of drive and reduces VMT. The project will be required to remove each of the pork chop islands on the north leg (Great Oaks Boulevard) at the Santa Teresa Boulevard/Great Oaks Boulevard intersection to improve pedestrian safety and access. A signal modification will be needed for the implementation of the pork-chop island removals at the northeast and northwest corners of Santa Teresa Boulevard/Great Oaks Boulevard intersection. In-lieu of the installed ADA curb ramps at Great Oaks Boulevard/Via Del Oro intersection, the project will be required to provide a contribution towards the signal improvements including PTZ cameras at the Via Del Oro/San Ignacio Ave and Via Del Oro/Great Oaks Blvd intersections to improve the pedestrian network in the project vicinity.

**Figure 10**  
**VMT per Employee Heat Map in Project Area**





**Figure 11**  
**VMT Analysis without Mitigations**



The implementation of the Tier 2 mitigation measures described above would reduce the VMT generated by the project to 14.34 per employee, which is less than the established impact threshold of 14.37 VMT per employee for industrial employment uses.

### Cumulative (GP Consistency) Evaluation

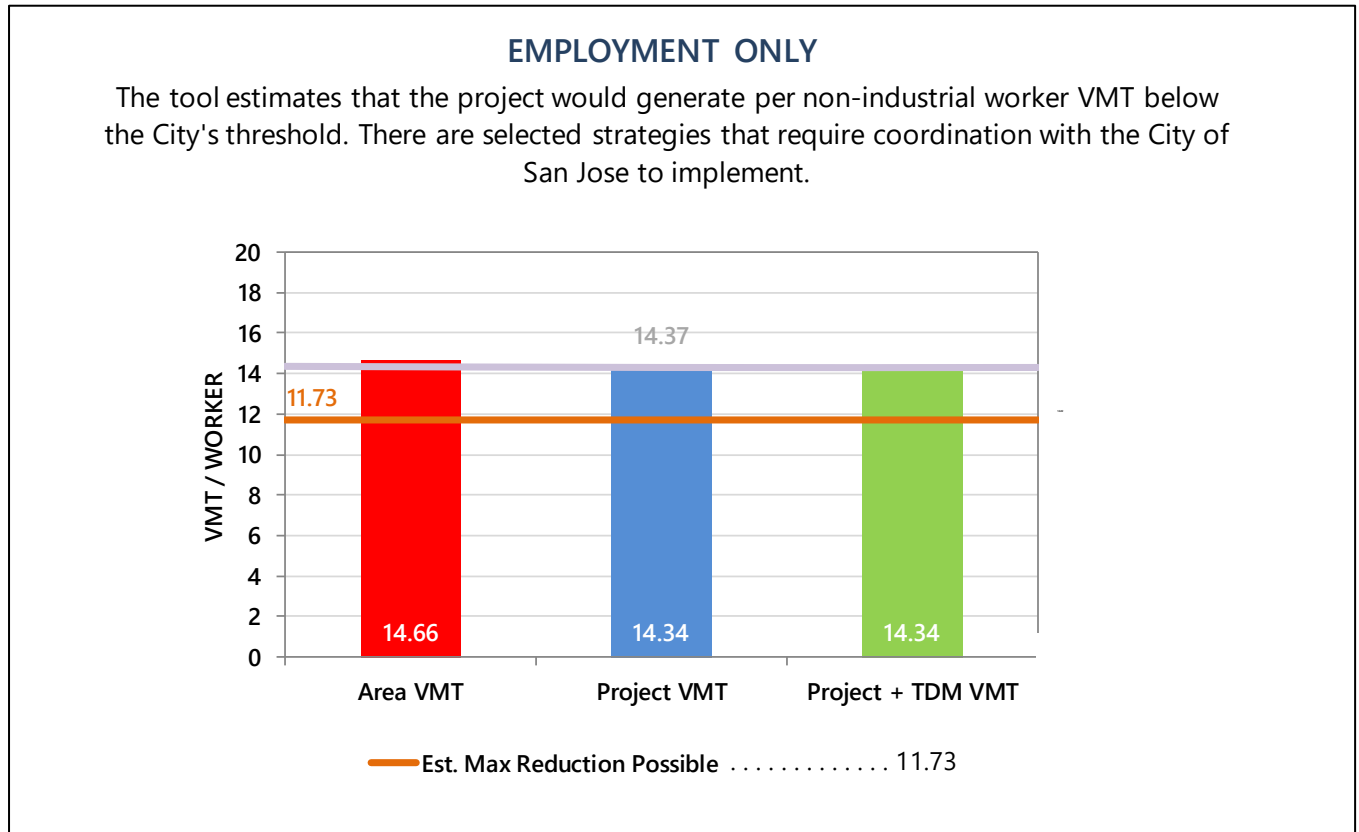
Projects must demonstrate consistency with the *Envision San José 2040 General Plan* to address cumulative impacts. Consistency with the City’s General Plan is based on the project’s density, design, and conformance to the General Plan’s goals and policies. If a project is determined to be inconsistent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

According to the *Envision San Jose 2040 General Plan*, approximately half of the project site is designated for *industrial park* uses, and the remaining portion of the site is designated for *transit employment center* uses. The industrial park designation is an industrial designation intended for a wide variety of industrial users such as research and development, manufacturing, assembly, testing, and offices. The transit employment center designation is applied to areas planned for intensive job

growth because of their importance as employment districts to the City and a high degree of access to transit and other facilities and services.

Since both the *industrial park and transit employment center* designations allow employment uses, the proposed data center project is consistent with the Envision San Jose 2040 General Plan and would not require a General Plan Amendment (GPA). 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 12**  
**VMT Analysis with Mitigations**



## 4.

# Local Transportation Analysis

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This chapter describes the Local Transportation Analysis (LTA) including the method by which project traffic is estimated, a review of site access and on-site circulation, effects on bicycle, pedestrian, and transit facilities, and parking.

The LTA supplements the CEQA VMT analysis and identifies transportation issues that may arise due to a development project. The LTA is required per the City of San Jose Transportation Policy, however, the determination of project impacts per CEQA requirements is based solely on the VMT analysis presented in the previous chapter. The LTA provides supplemental analysis for use by the City of San Jose in identifying potential improvement of the transportation system with a focus on improving multi-modal travel.

### Project Description

The project site is bounded by Via Del Oro to the north, San Ignacio Avenue to the west, Great Oaks Boulevard to the east, and vacant land to the south. The proposed project consists of the construction of three two-story data center buildings that will each be approximately 182,350 square feet (s.f.) in size for a total of 547,050 s.f. of building space. Primary access to the project site would be provided via a full access driveway along Great Oaks Boulevard. The site also will be served by one service driveway along Via Del Oro and three along San Ignacio Avenue.

### Project Trip Generation Estimates

#### Proposed Project Trips

Through empirical research, data have been collected that quantify the amount of traffic produced by common land uses. Thus, for the most common land uses, there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from new development. 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.

Based on the ITE's trip generation rates for data center land use #160, it is estimated that the proposed project would generate 542 daily trips, with 60 trips (33 inbound and 27 outbound) occurring during the AM peak hour and 49 trips (15 inbound and 34 outbound) occurring during the PM peak hour.

## Trip Reduction

Based on the 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 City's VMT Evaluation Tool. Based on the evaluation tool, the project site is located within a *Suburban with Single-Family Homes* place type. Based on Table 6 of the City of San Jose *Transportation Analysis Handbook*, April 2018, industrial/office developments within suburban areas with single-family homes have a 95% vehicle mode share. Thus, a five percent reduction was applied to the project trip generation estimates based on the location-based vehicle mode share produced from the San Jose Travel Demand Model.

## Net Project Trip Generation Estimates

After applying the ITE trip rates and appropriate trip reduction to the proposed project, it is estimated that the proposed project would generate 515 daily vehicle trips, with 57 trips (31 inbound and 26 outbound) occurring during the AM peak hour and 46 trips (14 inbound and 32 outbound) occurring during the PM peak hour. The project trip generation estimates are presented in Table 5.

## Site Access and On-Site Circulation

The evaluation of site access and circulation is based on the site plan dated July 24, 2020 and prepared by Sheehan Nagle Hartray Architects. Site access was evaluated to determine the adequacy of the site's access points with regard to the following: traffic volume, delays, geometric design, and sight distance. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

## Project Site Access

Access to the project site would be provided via a full access driveway along Great Oaks Boulevard. The project site would also have a driveway along Via Del Oro to serve trucks and three driveways along San Ignacio Avenue to provide access to service fuel roads. The gated project driveway on Great Oaks Boulevard would provide a connection to the main drive aisle lined with 90-degree parking stalls on both sides. A secondary surface parking area would also be located near the project driveway on Great Oaks Boulevard.

**Recommendation:** The northern and southern driveways on San Ignacio Avenue that provide ingress/egress to service fuel roads should be gated and restricted to Emergency Vehicle Access (EVA) only because the centrally located middle driveway would be adequate to serve as an access to the service fuel roads to/from San Ignacio Avenue.

## Driveway Design

Per City standards (City of San Jose Department of Transportation Geometric Guidelines), the typical business/industrial driveway width with two-way traffic is 32 feet. Based on the site plan, both the driveways on Great Oaks Boulevard and Via Del Oro are measured to be approximately 32 feet and would meet the City standards.



**Table 5  
Project Trip Generation Estimates**

Proposed Land Use	% of Vehicle Mode Share	Reduction %	Size	Daily		AM Peak Hour						PM Peak Hour					
				Rate	Trip	Rate	Split		Trip		Rate	Split		Trip			
							In	Out	In	Out		Total	In	Out	Total		
Data Center (ITE Land Use Code #160)			547,050 Square Feet	0.99	542	0.11	55%	45%	33	27	60	0.09	30%	70%	15	34	49
Location based reduction (Suburban w/single-family) <sup>1</sup>	95%	5%			-27				-2	-1	-3				-1	-2	-3
<b>Total Proposed Project Trips</b>					<b>515</b>				<b>31</b>	<b>26</b>	<b>57</b>				<b>14</b>	<b>32</b>	<b>46</b>

Source: ITE Trip Generation Manual, 10<sup>th</sup> Edition 2017

<sup>1</sup>The project site is located within a suburban area with single-family homes based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode share are obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2018). The trip reductions are based on the percent of mode share for other modes of travel beside vehicle.

The central driveway along San Ignacio Avenue measured to be approximately 20 feet wide would be adequate to serve as an emergency vehicle access based on the Santa Clara County Fire Department standards.

### **Project Driveway Operations**

The assignment of project traffic at each of the site driveways presumes that all passenger vehicles will utilize the primary gated entrance along Great Oaks Boulevard and all truck traffic will utilize the gated service entrance along Via Del Oro. The estimated project trips utilizing the project driveway are shown in Figure 13.

The driveway on Great Oaks Boulevard would provide approximately 225 feet of storage measured between the security gates and Great Oaks Boulevard, which can accommodate nine vehicles. It is estimated that there would be at most 31 vehicles entering the project site during the AM peak hour or one vehicle every two minutes on average. Therefore, vehicle queuing issues are not expected to occur at the parking garage entrance based on the relatively low number of project trips. Additionally, it is estimated that there would be at most five vehicles per hour making a left turn into the site from Great Oaks Boulevard. Therefore, the existing left-turn pocket storage of 100 feet would be adequate to serve the inbound project traffic from northbound Great Oaks Boulevard.

Based on the information provided by the applicant, the project is estimated to generate 8 to 10 trucks per day per building or approximately 25 to 30 trucks per day from 8 AM to 5 PM from Monday to Friday for all three buildings. The anticipated number of trucks equates to approximately two to four trucks per hour on average accessing the site driveway along Via Del Oro. Therefore, the low number of trucks would not cause significant adverse operations at the project driveway due to the low volumes on Via Del Oro.

### **On-Site Circulation**

On-site vehicular circulation was reviewed in accordance with the City of San Jose Zoning Code and generally accepted traffic engineering standards. In general, the proposed site plan would provide vehicle traffic with adequate connectivity through the parking areas.

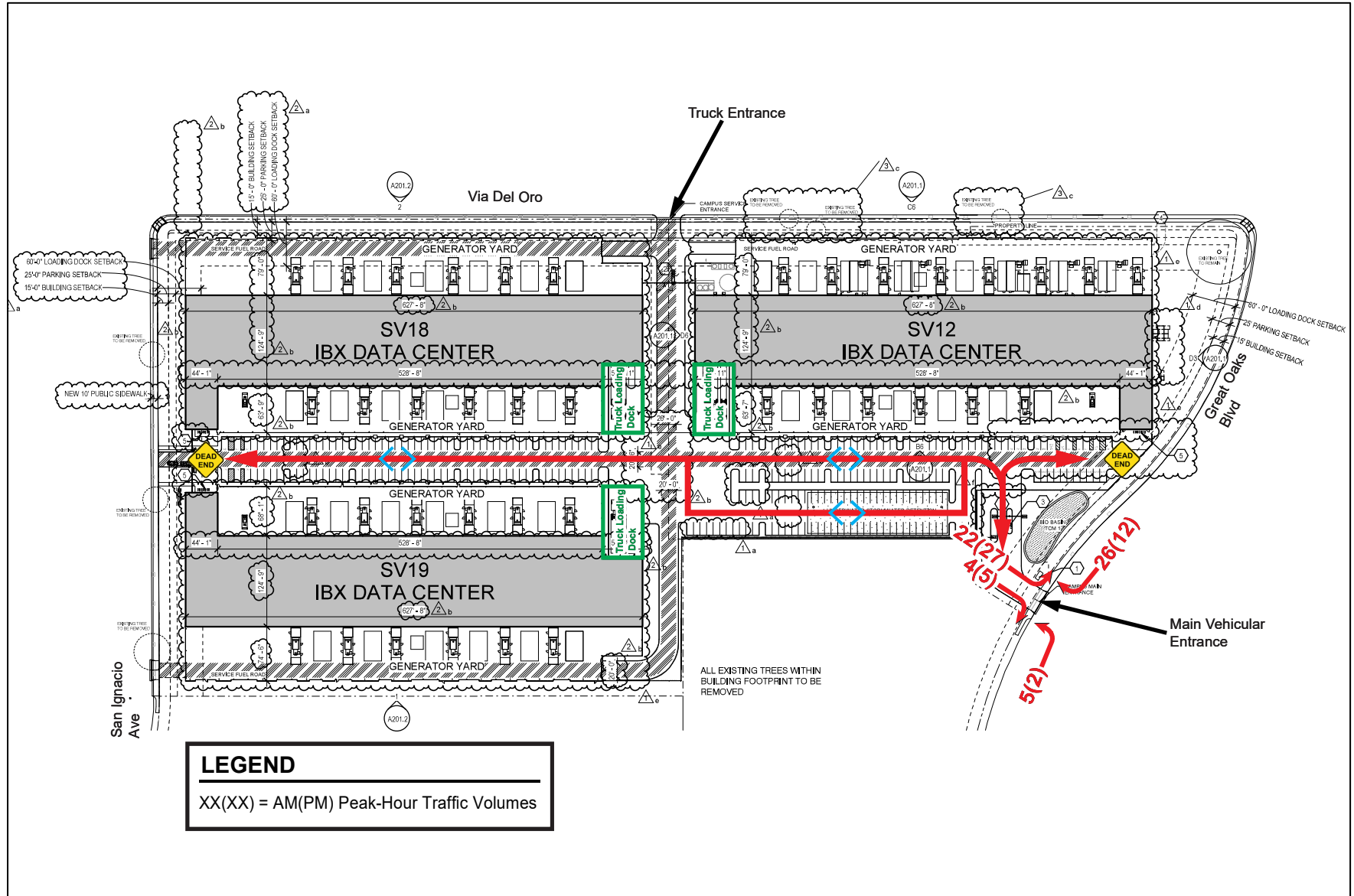
There are two dead-end aisles located at each end of the main drive aisle as shown in Figure 13. Dead-end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. It is recommended that one of the parking stalls located at each of the dead-end aisles should be dedicated to turn-around space for drivers to conduct three-point turns.

The City's standard minimum width for two-way drive aisles with 90-degree parking along both sides of the aisle is 26 feet wide. This allows sufficient room for vehicles to back out of the parking spaces. Based on the site plan, the drive aisles are lined with 90-degree parking stalls on both sides and measured to be approximately 26 feet wide. Additionally, the fuel service roads running along the eastern and western project site boundaries are measured to be approximately 20 feet wide without any parking. Therefore, the proposed drive aisle widths would satisfy the City's requirement. Ultimately, City staff will determine the adequacy of the proposed drive aisle width and internal circulation design.

### **Truck Operations and Turning Templates**

Truck turning templates shown in Figure 14 indicate that trucks would be able to utilize the project driveway on Via Del Oro to deliver materials to the three loading docks. However, the trucks will need to use the two-way left-turn lane and both travel lanes on Via Del Oro in order to avoid running over the driveway curbs. The Via Del Oro project driveway distance between the security and the back of the

**Figure 13**  
**Project Trips at Site Access Point and On-Site Circulation**



**Figure 14**  
**Truck Turning Templates**

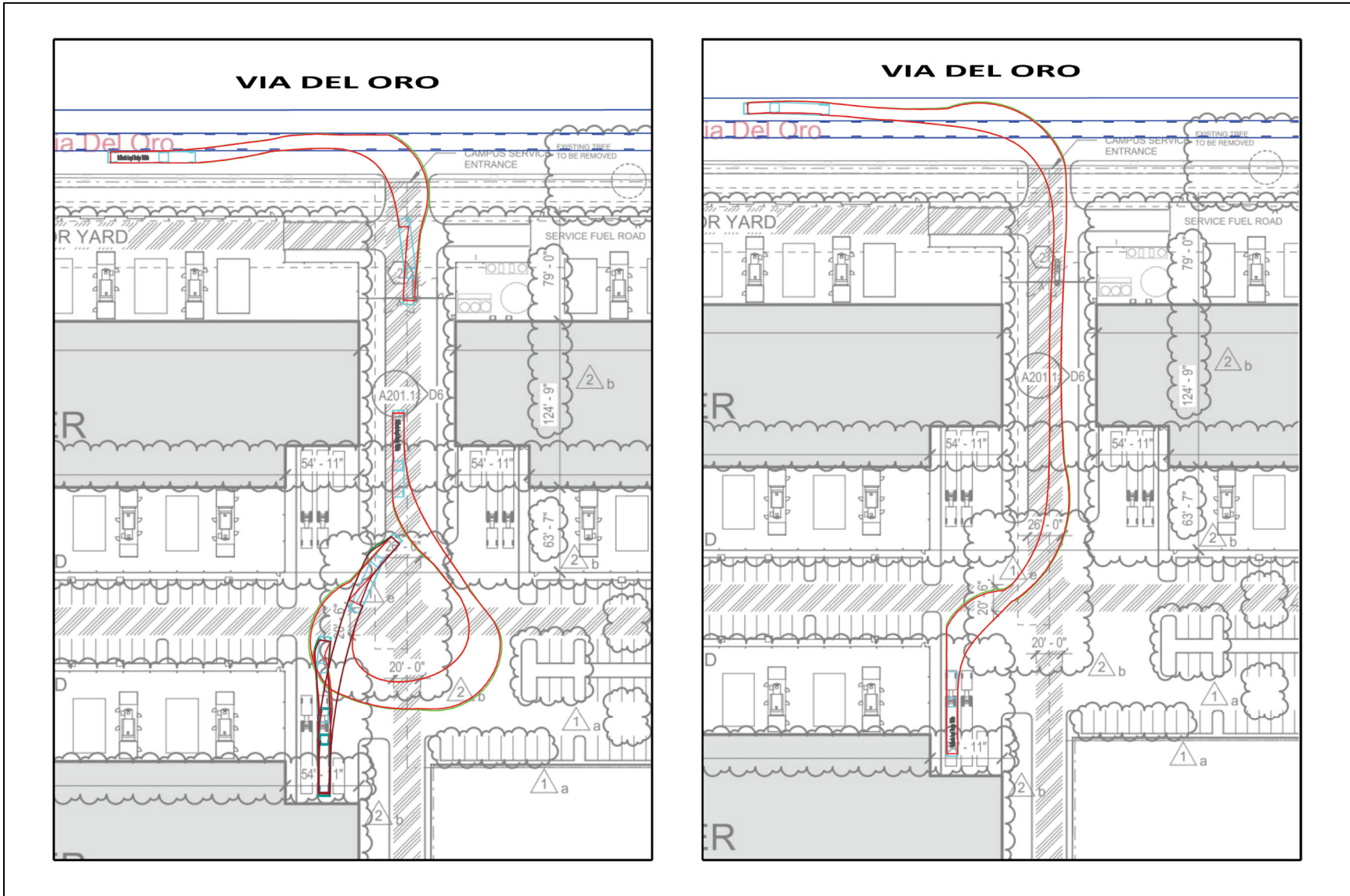
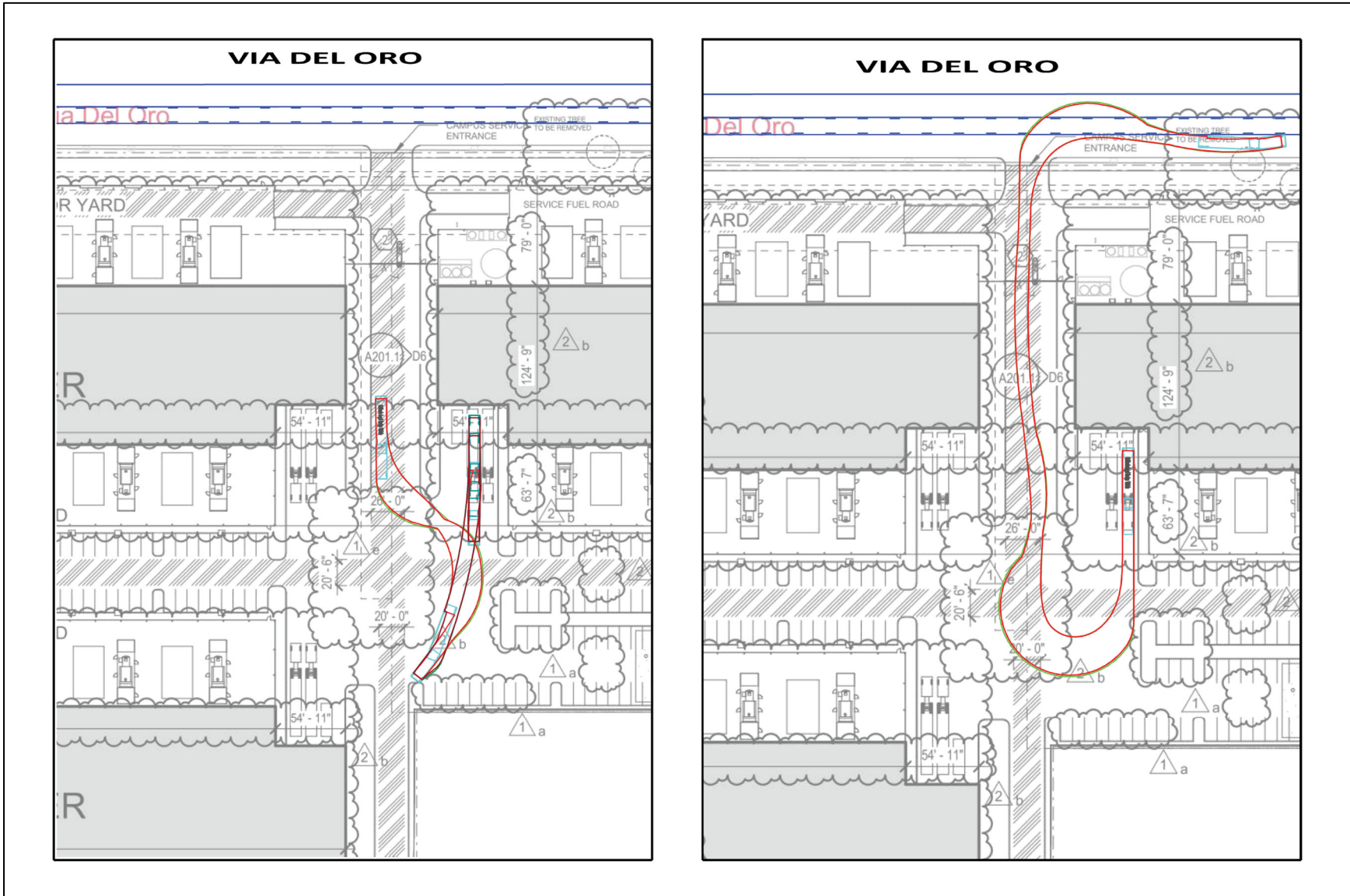


Figure 14 (Continued)  
Truck Turning Template







sidewalk is measured to be approximately 60 feet on the site plan, which would not be adequate to accommodate a California Legal Design Truck measuring 65 feet long expected to serve the project.

**Recommendation:** The project should abide by the City of San Jose standard driveway cut and curb radii for the driveway along Via Del Oro. Additionally, the security gate at the Via Del Oro project driveway should be relocated to at least 65 feet from the back of the sidewalk to accommodate trucking queuing at the gate waiting to enter the project site.

### Sight Distance

Adequate sight distance will be required at the project driveways on Great Oaks Boulevard, Via Del Oro, and San Ignacio Avenue. Only the central project driveway on San Ignacio Avenue would require adequate sight distance because the southern and northern project driveways on San Ignacio Avenue are recommended to be closed. The project driveway 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 other vehicles traveling on Great Oaks Boulevard, Via Del Oro, and San Ignacio Avenue. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.

Adequate sight distance (sight distance triangles) should be provided at the project driveways in accordance with the *American Association of State Highway Transportation Officials (AASHTO)* standards. Sight distance triangles should be measured approximately 10 feet back from the traveled way. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway and locate sufficient gaps in traffic flow. The minimum acceptable sight distance is often considered the AASHTO stopping sight distance.

Sight distance requirements vary depending on the roadway speeds. Via Del Oro/San Ignacio Avenue and Great Oaks Boulevard have posted speed limits of 35 and 40 mph along the project frontages, respectively. The AASHTO stopping sight distance for facilities with posted speed limits of 35 and 40 mph are 250 and 305 feet, respectively. Thus, a driver exiting the proposed project driveways on Via Del Oro/San Ignacio Avenue and Great Oaks Boulevard must be able to see 250 and 305 feet in both directions along Via Del Oro/San Ignacio Avenue and Great Oaks Boulevard, respectively.

Based on the project site plan and observations in the field, vehicles exiting the project site driveways on Via Del Oro/San Ignacio Avenue and Great Oaks Boulevard would be able to see approaching traffic at least 250 and 305 feet away in both directions, respectively. Therefore, it can be concluded that the project site driveways on Via Del Oro, San Ignacio Avenue, and Great Oaks Boulevard would meet the AASHTO minimum stopping sight distance standards.

**Recommendation:** The site design should ensure design features, in particular, the landscaping and signage along the project site frontage and at the project site driveways, would not interfere with the sight distance at the proposed site driveway.

### Vehicle Parking Requirement

According to the City of San Jose Zoning Code (Section 20.90.060), the project is required to provide one off-street vehicle parking space per 250 s.f. of floor area devoted to office use and one space per 5,000 s.f. of floor area devoted to data center use. Based on the site plan, the proposed 547,050 gross s.f. of building area would consist of 45,000 and 420,000 net s.f. of floor area devoted to office and data center uses, respectively. Based on the City's parking requirements, the project is required to provide 180 and 84 off-street vehicle parking spaces for the office and data center uses, respectively. The proposed 266 vehicle parking spaces on-site would exceed the required 264 parking spaces based on the City's requirements.

Based on the information provided by the applicant, each of the three buildings would have eight employees and up to seven visitors during the standard day shift, three employees and two visitors during the mid-day shift, and three employees and one visitor during the night shift for a total of 42 employees and 30 visitors per day for all three buildings. The parking demand would be the greatest during the day shift with at most 45 vehicles from employees and visitors for all three buildings. Therefore, the City's parking requirement of 264 spaces is substantially more than the project's peak parking demand. The City should consider allowing the project to provide fewer parking spaces than the standard requirement due to the low number of anticipated employees and visitors. The project applicant should coordinate with the City's Planning Department to decide if the project should be subject to different parking requirement standards due to the low number of employees/visitors.

## Bicycle Parking Requirement

According to the City's Bicycle Parking Standards (Chapter 20.90, Table 20-190), the project is required to provide one bicycle parking space per 5,000 s.f. of floor area devoted to office use and one space per 50,000 s.f. of floor area devoted to data center use. Based on the site plan, the proposed 547,050 gross s.f. of building area would consist of 45,000 and 420,000 net s.f. of floor area devoted to office and data center uses, respectively. Based on the City's bicycle parking requirements, the project is required to provide nine bicycle parking spaces each for the office and data center uses. Of the required bicycle parking, City standards require that 80 percent be short-term bicycle spaces and 20 percent be secured long-term bicycle spaces. This equates to 14 short-term bicycle parking spaces and four long-term bicycle parking spaces. The provided 21 bicycle parking spaces on-site would be more than the 18 required number of parking spaces based on the City's requirements. Bicycle parking for each building would be located along the main drive aisle near the project's frontages on Great Oaks Boulevard and San Ignacio Avenue as noted on the site plan bubbled as "Note 5".

## Pedestrian, Bicycle, and Transit Analysis

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

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

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

## Pedestrian Facilities

Pedestrian facilities near the project site consist of sidewalks along most of the streets in the project vicinity. Sidewalks are found along both sides of all streets near the project site with the exception of the west side of Santa Teresa Boulevard and the south side of the Santa Teresa Light Rail Station driveway from Via Del Oro. Other pedestrian facilities in the project area include crosswalks and pedestrian push buttons at all signalized intersections in the project vicinity.

Pedestrian generators in the project vicinity include retail centers on Bernal Road near San Ignacio Avenue and Santa Teresa Boulevard and the Santa Teresa LRT Station located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Existing sidewalks along Great Oaks Boulevard, Via Del Oro, and San Ignacio Avenue provide pedestrian connections between the project site and pedestrian destinations in the project vicinity.

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

## Bicycle Facilities

There are several bike facilities in the immediate vicinity of the project site. The bikeways within the vicinity of the project site would remain unchanged under project conditions. There are bike lanes provided along Great Oaks Boulevard and San Ignacio Avenue, including the segment along the project's frontages.

The San Jose Better Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

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

- Via Del Oro, along its entire length

### **Class IV protected bike lanes are planned for:**

- San Ignacio Avenue, between Bernal Road and Santa Teresa Boulevard
- Great Oaks Boulevard, along its entire length
- Santa Teresa Boulevard, along its entire length
- Bernal Road, between Heaton Moor Drive and Hellyer Avenue
- Santa Teresa LRT Station access road, along its entire length

As previously described, the City's General Plan identifies the bicycle commute mode split target as 15 percent or more by the year 2040. This calculates to at most approximately nine bicycle trips during the peak hours. This level of bicycle mode share is a reasonable goal for the project.

## Transit Services

Existing transit services in the study area are provided by VTA and Caltrain. The Santa Teresa LRT Station is located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Bus stops for Local Route 42 and Frequent Route 68 are located within walking from the project site on San Ignacio Avenue and Santa Teresa Boulevard, respectively. The new transit trips generated by the project are not expected to create demand in excess of the transit service capacity that is currently provided.

## 5. Conclusions

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The transportation analysis of the project was evaluated following the standards and methodologies set forth in the City of San Jose's Transportation Analysis Policy (Council Policy 5-1), the City of San Jose *Transportation Analysis Handbook 2018*, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014), and by the California Environmental Quality Act (CEQA). Per the requirements of the City of San Jose's Transportation Policy and *Transportation Analysis Handbook 2018*, the TA report for the project consists of a CEQA vehicle-miles-traveled (VMT) analysis and a supplemental Local Transportation Analysis (LTA)

### CEQA VMT Analysis

#### CEQA Transportation Analysis Exemption Criteria

The City of San Jose Transportation Analysis Handbook identifies screening criteria that determine whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required.

The project site is located within a planned growth area (EADP). However, the existing VMT per employee of 14.66 exceeds the City's established CEQA threshold of 14.37 per employee. Therefore, the proposed project would not meet the screening criteria for VMT analysis exemption since the project site is not located within a planned growth area with low VMT per employee and the 109,000 s.f. of equivalent industrial space for the proposed project would exceed the City's 30,000 s.f. small infill project criteria.

#### Project Impacts and Mitigation Measures

**Project Impact:** The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the project is projected to generate 14.65 VMT per employee, which would exceed the established impact threshold of 14.37 VMT per employee for industrial employment uses. Therefore, the project would result in an impact on the transportation system based on the City's VMT impact criteria.

**Mitigation Measures:** Based on preliminary direction from City staff, the project will be required to implement the following multi-modal facility improvements to reduce the project's VMT impact to less than significant levels.



- Expand the Reach of Bike Access with Investment in Infrastructure (Tier 2 – Bike Access Improvements): Implement bicycle facilities that close gaps in the bicycle network and/or improve the existing bicycle network (e.g. construct barrier or buffer for an existing bike lane). Improving bike access to the project promotes biking as an alternative to driving and reduces VMT. The San Jose Better Bike Plan 2025 identifies Class II bike lanes along Via Del Oro between Bernal Road and Raleigh Road. Additionally, the existing Class II bike lanes along Great Oaks Boulevard, San Ignacio Avenue, and Santa Teresa Boulevard in the project vicinity are planned to be converted to Class IV protected bike lanes. The project will be required to implement Class II bike lanes along Via Del Oro on the opposing side of the project frontage between San Ignacio Avenue and Great Oaks Boulevard. **And**
- Provide Pedestrian Network Improvements for Active Transportation (Tier 2 – Pedestrian Access Improvements): Implement pedestrian improvements both on-site and in the surrounding area. Improving pedestrian connections encourages people to walk instead of drive and reduces VMT. The project will be required to remove each of the pork chop islands on the north leg (Great Oaks Boulevard) at the Santa Teresa Boulevard/Great Oaks Boulevard intersection to improve pedestrian safety and access. A signal modification will be needed for the implementation of the pork-chop island removals at the northeast and northwest corners of Santa Teresa Boulevard/Great Oaks Boulevard intersection. In-lieu of the installed ADA curb ramps at Great Oaks Boulevard/Via Del Oro intersection, the project will be required to provide a contribution towards the signal improvements including PTZ cameras at the Via Del Oro/San Ignacio Ave and Via Del Oro/Great Oaks Blvd intersections to improve the pedestrian network in the project vicinity.

The implementation of the Tier 2 mitigation measures described above would reduce the VMT generated by the project to 14.34 per employee, which is less than the established impact threshold of 14.37 VMT per employee for industrial employment uses.

### **Cumulative (GP Consistency) Evaluation**

Projects must demonstrate consistency with the *Envision San José 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's goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required per the City's *Transportation Analysis Handbook*.

According to the *Envision San Jose 2040 General Plan*, approximately half of the project site is designated for *industrial park* uses, and the remaining portion of the site is designated for *transit employment center* uses. The industrial park designation is an industrial designation intended for a wide variety of industrial users such as research and development, manufacturing, assembly, testing, and offices. The transit employment center designation is applied to areas planned for intensive job growth because of their importance as employment districts to the City and a high degree of access to transit and other facilities and services.

Since both the *industrial park* and *transit employment center* designations allow employment uses, the proposed data center project is consistent with the *Envision San Jose 2040 General Plan* and would not require a General Plan Amendment (GPA). 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.

## Local Transportation Analysis

The intersection operations analysis completed as part of the LTA is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

### Trip Generation

After applying the ITE trip rates and appropriate trip reduction to the proposed project, it is estimated that the proposed project would generate 515 daily vehicle trips, with 57 trips (31 inbound and 26 outbound) occurring during the AM peak hour and 46 trips (14 inbound and 32 outbound) occurring during the PM peak hour.

### Recommended Site Access and On-Site Circulation Improvements

The following improvements are recommended to improve access to the project site and on-site circulation:

- The northern and southern driveways on San Ignacio Avenue that provide ingress/egress to service fuel roads should be gated and restricted to Emergency Vehicle Access (EVA) only because the centrally located middle driveway would be adequate to serve as an access to the service fuel roads to/from San Ignacio Avenue.
- The site design should ensure design features, in particular, the landscaping and signage along the project site frontage and at the project site driveways, would not interfere with the sight distance at the proposed site driveway.
- The project should abide by the City of San Jose standard driveway cut and curb radii for the driveway along Via Del Oro. Additionally, the security gate at the Via Del Oro project driveway should be relocated to at least 65 feet from the back of the sidewalk to accommodate trucking queuing at the gate waiting to enter the project site.

### Parking Supply

#### Vehicular Parking

Based on the City's parking requirements, the project is required to provide 180 and 84 off-street vehicle parking spaces for the office and data center uses, respectively. The proposed 266 vehicle parking spaces on-site would exceed the required 264 parking spaces based on the City's requirements.

Based on the information provided by the applicant, each of the three buildings would have eight employees and up to seven visitors during the standard day shift, three employees and two visitors during the mid-day shift, and three employees and one visitor during the night shift for a total of 42 employees and 30 visitors per day for all three buildings. The parking demand would be the greatest during the day shift with at most 45 vehicles from employees and visitors for all three buildings. Therefore, the City's parking requirement of 264 spaces is substantially more than the project's peak parking demand. The City should consider allowing the project to provide fewer parking spaces than the standard requirement due to the low number of anticipated employees and visitors. The project applicant should coordinate with the City's Planning Department to decide if the project should be subject to different parking requirement standards due to the low number of employees/visitors.

### **Bicycle Parking**

Based on the City's bicycle parking requirements, the project is required to provide nine bicycle parking spaces each for the office and data center uses. The provided 21 bicycle parking spaces on-site would be more than the 18 required number of parking spaces based on the City's requirements.

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

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

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Pedestrian generators in the project vicinity include retail centers on Bernal Road near San Ignacio Avenue and Santa Teresa Boulevard and the Santa Teresa LRT Station located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Existing sidewalks along Great Oaks Boulevard, Via Del Oro, and San Ignacio Avenue provide pedestrian connections between the project site and pedestrian destinations in the project vicinity.

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

### **Bicycle Facilities**

There are several bike facilities in the immediate vicinity of the project site. The bikeways within the vicinity of the project site would remain unchanged under project conditions. There are bike lanes provided along Great Oaks Boulevard and San Ignacio Avenue, including the segment along the project's frontages.

The San Jose Better Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

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

- Via Del Oro, along its entire length

#### **Class IV protected bike lanes are planned for:**

- San Ignacio Avenue, between Bernal Road and Santa Teresa Boulevard
- Great Oaks Boulevard, along its entire length
- Santa Teresa Boulevard, along its entire length
- Bernal Road, between Heaton Moor Drive and Hellyer Avenue
- Santa Teresa LRT Station access road, along its entire length

As previously described, the City's General Plan identifies the bicycle commute mode split target as 15 percent or more by the year 2040. This calculates to at most approximately nine bicycle trips during the peak hours. This level of bicycle mode share is a reasonable goal for the project.

### **Transit Services**

Existing transit services in the study area are provided by VTA and Caltrain. The Santa Teresa LRT Station is located approximately 0.5 miles north of the project site at the northern end of Via Del Oro. Bus stops for Local Route 42 and Frequent Route 68 are located within walking from the project site on San Ignacio Avenue and Santa Teresa Boulevard, respectively. The new transit trips generated by the project are not expected to create demand in excess of the transit service capacity that is currently provided.

**Via Del Oro Data Center Development TA  
Technical Appendices**

March 5, 2021



**Appendix A**  
**San Jose VMT Evaluation Tool Output Sheet**

# Without Mitigations

## CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

### PROJECT:

Name: Via Del Oro Data Center Development	Tool Version: 2/29/2019
Location: Via Del Oro and Great Oaks Boulevard	Date: 3/4/2021
Parcel: 70602060      Parcel Type: Suburb with Single-Family Homes	
Proposed Parking Spaces      Vehicles: 266      Bicycles: 21	

### LAND USE:

Residential:	Percent of All Residential Units		
Single Family      0 DU	Extremely Low Income ( ≤ 30% MFI)	0 %	Affordable
Multi Family      0 DU	Very Low Income ( > 30% MFI, ≤ 50% MFI)	0 %	Affordable
Subtotal      0 DU	Low Income ( > 50% MFI, ≤ 80% MFI)	0 %	Affordable
Office:      0 KSF			
Retail:      0 KSF			
Industrial:      109 KSF			

### VMT REDUCTION STRATEGIES

#### Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer) . . . . .	3
With Project Density (DU/Residential Acres in half-mile buffer) . . . . .	3
Increase Development Diversity	
Existing Activity Mix Index . . . . .	0.92
With Project Activity Mix Index . . . . .	0.92
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units . . . . .	0 %
Very Low Income BMR units . . . . .	0 %
Low Income BMR units . . . . .	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	31
With Project Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	32

#### Tier 2 - Multimodal Infrastructure

#### Tier 3 - Parking

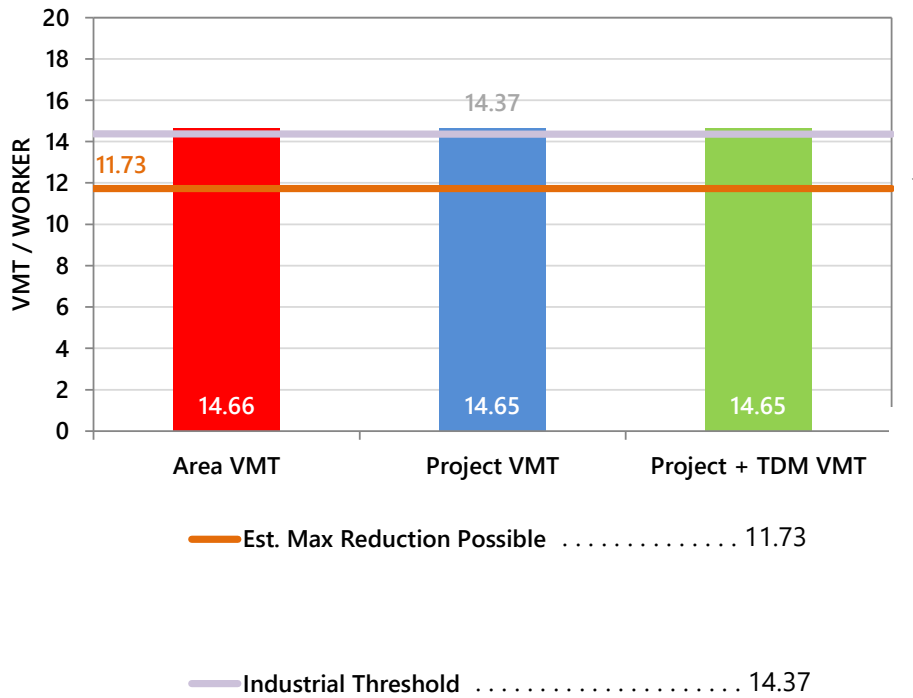
#### Tier 4 - TDM Programs

# Without Mitigations

## CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

### EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT and per industrial worker VMT above the City's threshold.



# With Mitigations

## CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

### PROJECT:

Name: Via Del Oro Data Center Development	Tool Version: 2/29/2019
Location: Via Del Oro and Great Oaks Boulevard	Date: 3/4/2021
Parcel: 70602060      Parcel Type: Suburb with Single-Family Homes	
Proposed Parking Spaces      Vehicles: 266      Bicycles: 21	

### LAND USE:

Residential:	Percent of All Residential Units		
Single Family      0 DU	Extremely Low Income ( ≤ 30% MFI)	0 %	Affordable
Multi Family      0 DU	Very Low Income ( > 30% MFI, ≤ 50% MFI)	0 %	Affordable
<u>Subtotal</u> 0 DU	Low Income ( > 50% MFI, ≤ 80% MFI)	0 %	Affordable
Office:      0 KSF			
Retail:      0 KSF			
Industrial:      109 KSF			

### VMT REDUCTION STRATEGIES

#### Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer) . . . . .	3
With Project Density (DU/Residential Acres in half-mile buffer) . . . . .	3
Increase Development Diversity	
Existing Activity Mix Index . . . . .	0.92
With Project Activity Mix Index . . . . .	0.92
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units . . . . .	0 %
Very Low Income BMR units . . . . .	0 %
Low Income BMR units . . . . .	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	31
With Project Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	32

#### Tier 2 - Multimodal Infrastructure

Bike Access Improvements <i>(In Coordination with SJ)</i>	
Distance to Nearest Existing Bicycle Facility . . . . .	1500 feet
Distance to Nearest Bicycle Facility With Project . . . . .	10 feet
Pedestrian Network Improvements <i>(In Coordination with SJ)</i>	
Are pedestrian improvements provided beyond the development frontage? . . . . .	Yes

#### Tier 3 - Parking

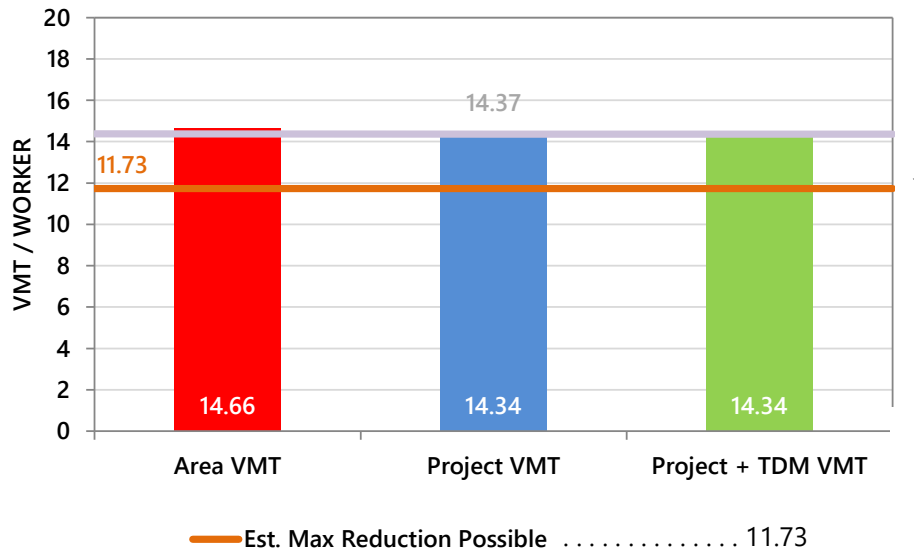
#### Tier 4 - TDM Programs

# With Mitigations

## CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

### EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.





**Appendix B**  
**Volume Summary**

Intersection Number: 1  
 Traffix Node Number: 3562  
 Intersection Name: Santa Teresa Boulevard and Great Oaks Boulevard  
 Peak Hour: AM  
 Count Date: 10/22/15

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	64	322	47	36	184	52	117	658	55	37	134	48	1754
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>68</b>	<b>342</b>	<b>50</b>	<b>39</b>	<b>196</b>	<b>56</b>	<b>125</b>	<b>699</b>	<b>59</b>	<b>40</b>	<b>143</b>	<b>51</b>	<b>1868</b>

Intersection Number: 2  
 Traffix Node Number: 3774  
 Intersection Name: Santa Teresa Boulevard and San Ignacio Avenue  
 Peak Hour: AM  
 Count Date: 10/26/16

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	121	403	118	88	89	9	27	588	32	73	140	204	1892
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>121</b>	<b>403</b>	<b>118</b>	<b>88</b>	<b>89</b>	<b>9</b>	<b>27</b>	<b>588</b>	<b>32</b>	<b>73</b>	<b>140</b>	<b>204</b>	<b>1892</b>

Intersection Number: 3  
 Traffix Node Number: 3918  
 Intersection Name: Via Del Oro and Great Oaks Boulevard  
 Peak Hour: AM  
 Count Date: 10/26/16

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	31	209	126	69	78	34	38	216	12	2	25	3	843
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>31</b>	<b>209</b>	<b>126</b>	<b>69</b>	<b>78</b>	<b>34</b>	<b>38</b>	<b>216</b>	<b>12</b>	<b>2</b>	<b>25</b>	<b>3</b>	<b>843</b>

Intersection Number: 4  
 Traffix Node Number: 3921  
 Intersection Name: Via Del Oro and San Ignacio Avenue  
 Peak Hour: AM  
 Count Date: 10/27/15

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	128	208	2	16	50	30	30	231	47	26	29	18	815
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>128</b>	<b>208</b>	<b>2</b>	<b>16</b>	<b>50</b>	<b>30</b>	<b>30</b>	<b>231</b>	<b>47</b>	<b>26</b>	<b>29</b>	<b>18</b>	<b>815</b>

Intersection Number: 1  
 Trafix Node Number: 3562  
 Intersection Name: Santa Teresa Boulevard and Great Oaks Boulevard  
 Peak Hour: PM  
 Count Date: 10/22/15

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	27	694	44	77	106	111	86	465	37	23	48	30	1748
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>29</b>	<b>737</b>	<b>47</b>	<b>82</b>	<b>113</b>	<b>118</b>	<b>92</b>	<b>494</b>	<b>40</b>	<b>25</b>	<b>51</b>	<b>32</b>	<b>1860</b>

Intersection Number: 2  
 Trafix Node Number: 3774  
 Intersection Name: Santa Teresa Boulevard and San Ignacio Avenue  
 Peak Hour: PM  
 Count Date: 10/26/16

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	138	677	54	112	113	17	9	484	49	64	71	91	1879
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>138</b>	<b>677</b>	<b>54</b>	<b>112</b>	<b>113</b>	<b>17</b>	<b>9</b>	<b>484</b>	<b>49</b>	<b>64</b>	<b>71</b>	<b>91</b>	<b>1879</b>

Intersection Number: 3  
 Trafix Node Number: 3918  
 Intersection Name: Via Del Oro and Great Oaks Boulevard  
 Peak Hour: PM  
 Count Date: 10/26/16

Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	20	249	126	130	67	49	50	146	12	10	83	40	982
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>20</b>	<b>249</b>	<b>126</b>	<b>130</b>	<b>67</b>	<b>49</b>	<b>50</b>	<b>146</b>	<b>12</b>	<b>10</b>	<b>83</b>	<b>40</b>	<b>982</b>

Intersection Number: 4  
 Trafix Node Number: 3921  
 Intersection Name: Via Del Oro and San Ignacio Avenue  
 Peak Hour: PM  
 Count Date: 10/27/15

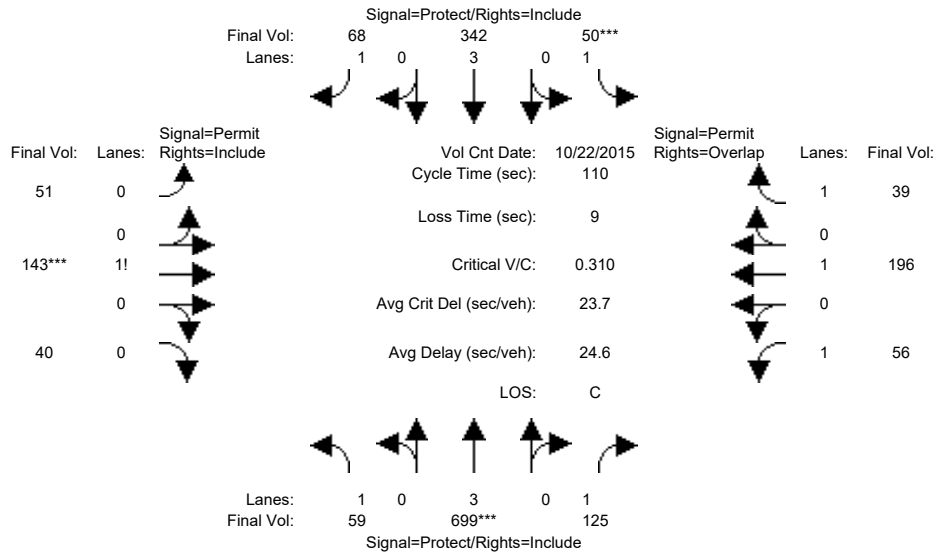
Scenario:	Movements												Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	15	157	2	13	35	56	41	131	19	21	95	80	665
<b>Existing Conditions (with 1% compound growth if older than 2 years)</b>	<b>15</b>	<b>157</b>	<b>2</b>	<b>13</b>	<b>35</b>	<b>56</b>	<b>41</b>	<b>131</b>	<b>19</b>	<b>21</b>	<b>95</b>	<b>80</b>	<b>665</b>

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

Via Del Oro Data Center Development

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

Intersection #3562: GREAT OAKS/SANTA TERESA



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: 22 Oct 2015 << 7:35-8:35											
Base Vol:	59	699	125	50	342	68	51	143	40	56	196	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	699	125	50	342	68	51	143	40	56	196	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	699	125	50	342	68	51	143	40	56	196	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	699	125	50	342	68	51	143	40	56	196	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	699	125	50	342	68	51	143	40	56	196	39
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:	59	699	125	50	342	68	51	143	40	56	196	39

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	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.22	0.61	0.17	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	381	1069	299	1750	1900	1750

Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.07	0.03	0.06	0.04	0.13	0.13	0.13	0.03	0.10	0.02
Crit Moves:	****			****			****					
Green Time:	22.1	43.5	43.5	10.1	31.5	31.5	47.4	47.4	47.4	47.4	47.4	57.5
Volume/Cap:	0.17	0.31	0.18	0.31	0.21	0.14	0.31	0.31	0.31	0.07	0.24	0.04
Delay/Veh:	36.6	23.0	21.8	47.8	29.8	29.2	20.8	20.8	20.8	18.4	20.0	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:	36.6	23.0	21.8	47.8	29.8	29.2	20.8	20.8	20.8	18.4	20.0	12.8
LOS by Move:	D	C	C	D	C	C	C	C	C	B	C	B
HCM2kAvgQ:	2	5	3	2	3	2	6	6	6	1	4	1

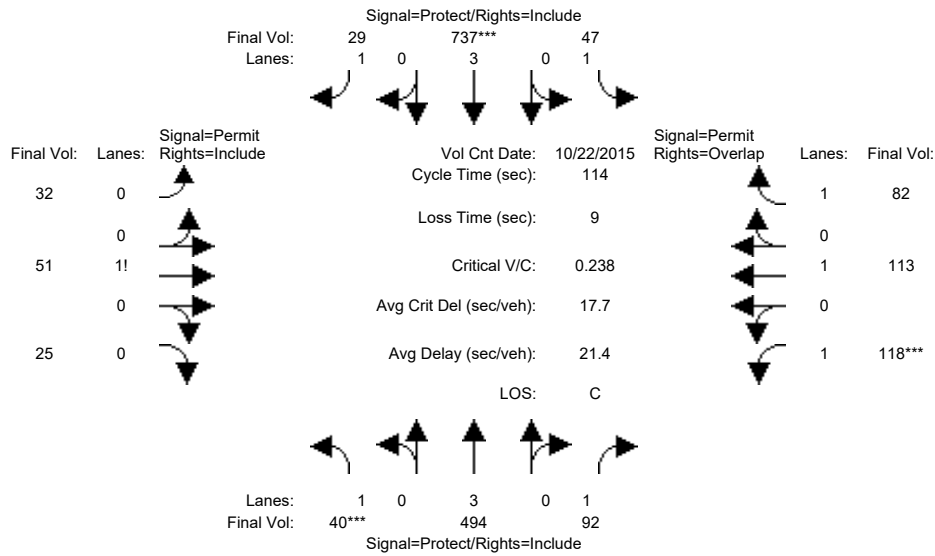
Note: Queue reported is the number of cars per lane.



Via Del Oro Data Center Development

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

Intersection #3562: GREAT OAKS/SANTA TERESA



Approach:	North Bound			South Bound			East Bound			West Bound		
	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: 22 Oct 2015 << 4:45-5:45

Base Vol:	40	494	92	47	737	29	32	51	25	118	113	82
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:	40	494	92	47	737	29	32	51	25	118	113	82
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	494	92	47	737	29	32	51	25	118	113	82
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:	40	494	92	47	737	29	32	51	25	118	113	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	494	92	47	737	29	32	51	25	118	113	82
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:	40	494	92	47	737	29	32	51	25	118	113	82

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	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.30	0.47	0.23	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	519	826	405	1750	1900	1750

Capacity Analysis Module:

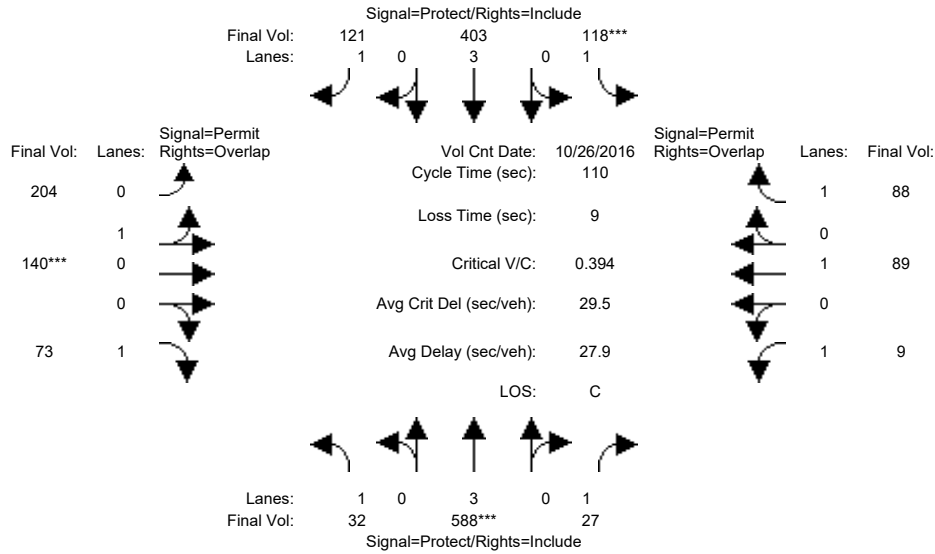
Vol/Sat:	0.02	0.09	0.05	0.03	0.13	0.02	0.06	0.06	0.06	0.07	0.06	0.05
Crit Moves:	****				****					****		
Green Time:	10.9	42.8	42.8	30.0	61.8	61.8	32.2	32.2	32.2	32.2	32.2	62.2
Volume/Cap:	0.24	0.23	0.14	0.10	0.24	0.03	0.22	0.22	0.22	0.24	0.21	0.09
Delay/Veh:	48.4	24.4	23.6	31.9	13.8	12.2	31.5	31.5	31.5	31.7	31.4	12.4
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:	48.4	24.4	23.6	31.9	13.8	12.2	31.5	31.5	31.5	31.7	31.4	12.4
LOS by Move:	D	C	C	C	B	B	C	C	C	C	C	B
HCM2kAvgQ:	1	4	2	1	4	0	3	3	3	3	3	1

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

Via Del Oro Data Center Development

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

Intersection #3774: SAN IGNACIO/SANTA TERESA



Approach:	North Bound			South Bound			East Bound			West Bound		
	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: 26 Oct 2016 << 8:00-9:00

Base Vol:	32	588	27	118	403	121	204	140	73	9	89	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	588	27	118	403	121	204	140	73	9	89	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	588	27	118	403	121	204	140	73	9	89	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	588	27	118	403	121	204	140	73	9	89	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	588	27	118	403	121	204	140	73	9	89	88
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:	32	588	27	118	403	121	204	140	73	9	89	88

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	1.00	0.92	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.59	0.41	1.00	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1067	733	1750	1750	1900	1750

Capacity Analysis Module:

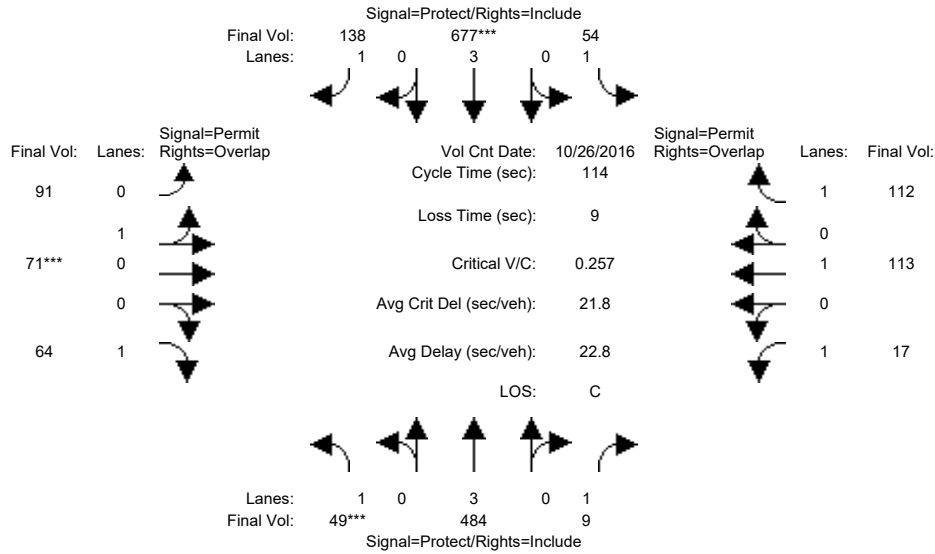
Vol/Sat:	0.02	0.10	0.02	0.07	0.07	0.07	0.19	0.19	0.04	0.01	0.05	0.05
Crit Moves:	****			****			****			****		
Green Time:	19.6	28.8	28.8	18.8	28.0	28.0	53.4	53.4	73.0	53.4	53.4	72.2
Volume/Cap:	0.10	0.39	0.06	0.39	0.28	0.27	0.39	0.39	0.06	0.01	0.10	0.08
Delay/Veh:	38.0	33.6	30.5	41.4	33.0	33.1	18.3	18.3	6.5	14.7	15.3	6.9
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:	38.0	33.6	30.5	41.4	33.0	33.1	18.3	18.3	6.5	14.7	15.3	6.9
LOS by Move:	D	C	C	D	C	C	B	B	A	B	B	A
HCM2kAvqQ:	1	5	1	4	4	4	8	8	1	0	2	1

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

Via Del Oro Data Center Development

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

Intersection #3774: SAN IGNACIO/SANTA TERESA



Approach:	North Bound			South Bound			East Bound			West Bound		
	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: 26 Oct 2016 << 5:00-6:00

Base Vol:	49	484	9	54	677	138	91	71	64	17	113	112
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:	49	484	9	54	677	138	91	71	64	17	113	112
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	484	9	54	677	138	91	71	64	17	113	112
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:	49	484	9	54	677	138	91	71	64	17	113	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	484	9	54	677	138	91	71	64	17	113	112
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:	49	484	9	54	677	138	91	71	64	17	113	112

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	1.00	0.92	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.56	0.44	1.00	1.00	1.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1011	789	1750	1750	1900	1750

Capacity Analysis Module:

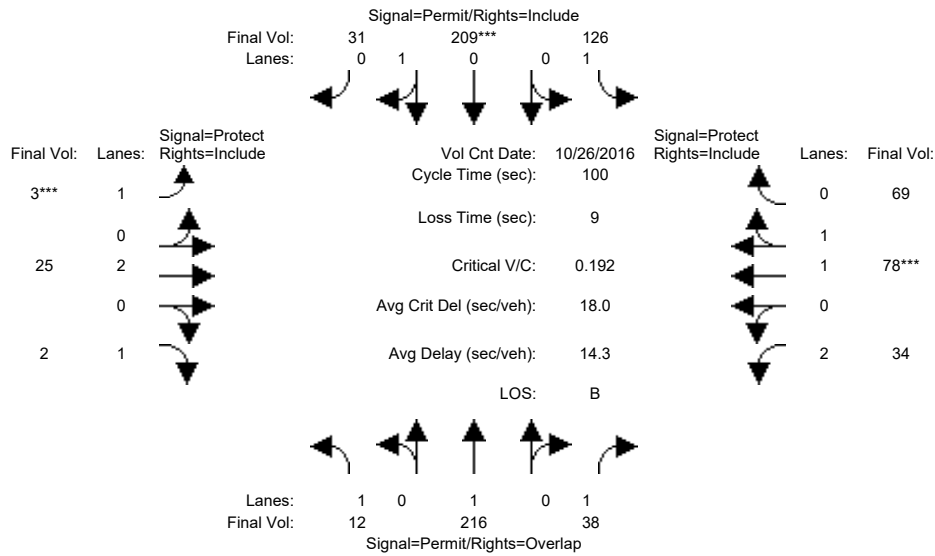
Vol/Sat:	0.03	0.08	0.01	0.03	0.12	0.08	0.09	0.09	0.04	0.01	0.06	0.06
Crit Moves:	****				****			****				
Green Time:	12.4	38.3	38.3	26.8	52.7	52.7	39.9	39.9	52.3	39.9	39.9	66.7
Volume/Cap:	0.26	0.25	0.02	0.13	0.26	0.17	0.26	0.26	0.08	0.03	0.17	0.11
Delay/Veh:	47.3	27.5	25.3	34.6	18.8	18.0	26.7	26.7	17.4	24.3	25.7	10.5
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:	47.3	27.5	25.3	34.6	18.8	18.0	26.7	26.7	17.4	24.3	25.7	10.5
LOS by Move:	D	C	C	C	B	B	C	C	B	C	C	B
HCM2kAvgQ:	2	4	0	2	5	3	4	4	1	0	3	2

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

Via Del Oro Data Center Development

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

Intersection #3918: GREAT OAKS/VIA DEL ORO



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: 26 Oct 2016 << 7:45-8:44

Base Vol:	12	216	38	126	209	31	3	25	2	34	78	69
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:	12	216	38	126	209	31	3	25	2	34	78	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	216	38	126	209	31	3	25	2	34	78	69
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:	12	216	38	126	209	31	3	25	2	34	78	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	216	38	126	209	31	3	25	2	34	78	69
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:	12	216	38	126	209	31	3	25	2	34	78	69

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	0.95	0.95	0.92	1.00	0.92	0.83	1.00	0.95
Lanes:	1.00	1.00	1.00	1.00	0.87	0.13	1.00	2.00	1.00	2.00	1.04	0.96
Final Sat.:	1750	1900	1750	1750	1567	232	1750	3800	1750	3150	1962	1736

Capacity Analysis Module:

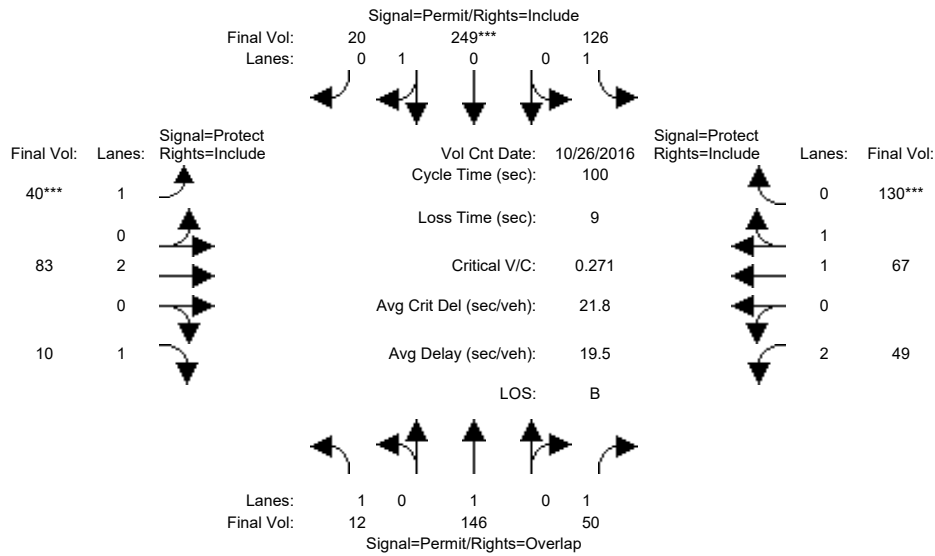
Vol/Sat:	0.01	0.11	0.02	0.07	0.13	0.13	0.00	0.01	0.00	0.01	0.04	0.04
Crit Moves:					****		****				****	
Green Time:	64.7	64.7	75.5	64.7	64.7	64.7	7.0	15.5	15.5	10.8	19.3	19.3
Volume/Cap:	0.01	0.18	0.03	0.11	0.21	0.21	0.02	0.04	0.01	0.10	0.21	0.21
Delay/Veh:	6.3	7.3	3.1	6.9	7.6	7.6	43.7	36.1	35.8	40.8	34.6	34.6
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:	6.3	7.3	3.1	6.9	7.6	7.6	43.7	36.1	35.8	40.8	34.6	34.6
LOS by Move:	A	A	A	A	A	A	D	D	D	D	C	C
HCM2kAvqQ:	0	3	0	2	3	3	0	0	0	1	2	2

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

Via Del Oro Data Center Development

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

Intersection #3918: GREAT OAKS/VIA DEL ORO



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: 26 Oct 2016 << 5:00-6:00

Base Vol:	12	146	50	126	249	20	40	83	10	49	67	130
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:	12	146	50	126	249	20	40	83	10	49	67	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	146	50	126	249	20	40	83	10	49	67	130
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:	12	146	50	126	249	20	40	83	10	49	67	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	146	50	126	249	20	40	83	10	49	67	130
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:	12	146	50	126	249	20	40	83	10	49	67	130

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	0.95	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	0.93	0.07	1.00	2.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1666	134	1750	3800	1750	3150	1900	1750

Capacity Analysis Module:

Vol/Sat:	0.01	0.08	0.03	0.07	0.15	0.15	0.02	0.02	0.01	0.02	0.04	0.07
Crit Moves:					****	****						****
Green Time:	55.2	55.2	69.9	55.2	55.2	55.2	8.4	21.1	21.1	14.8	27.4	27.4
Volume/Cap:	0.01	0.14	0.04	0.13	0.27	0.27	0.27	0.10	0.03	0.11	0.13	0.27
Delay/Veh:	10.2	11.2	4.7	11.1	12.5	12.5	47.4	32.1	31.5	37.4	27.5	29.4
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:	10.2	11.2	4.7	11.1	12.5	12.5	47.4	32.1	31.5	37.4	27.5	29.4
LOS by Move:	B	B	A	B	B	B	D	C	C	D	C	C
HCM2kAvgQ:	0	2	1	2	5	5	1	1	0	1	2	3

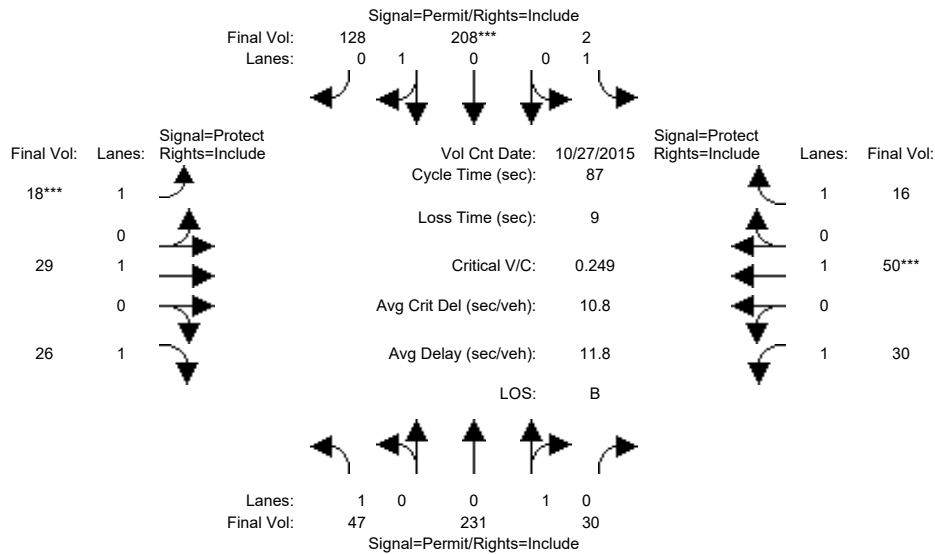
Note: Queue reported is the number of cars per lane.



Via Del Oro Data Center Development

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

Intersection #3921: SAN IGNACIO/VIA DEL ORO



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 << 8:00-9:00											
Base Vol:	47	231	30	2	208	128	18	29	26	30	50	16
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:	47	231	30	2	208	128	18	29	26	30	50	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	231	30	2	208	128	18	29	26	30	50	16
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:	47	231	30	2	208	128	18	29	26	30	50	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	231	30	2	208	128	18	29	26	30	50	16
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:	47	231	30	2	208	128	18	29	26	30	50	16

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.89	0.11	1.00	0.62	0.38	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1593	207	1750	1114	686	1750	1900	1750	1750	1900	1750

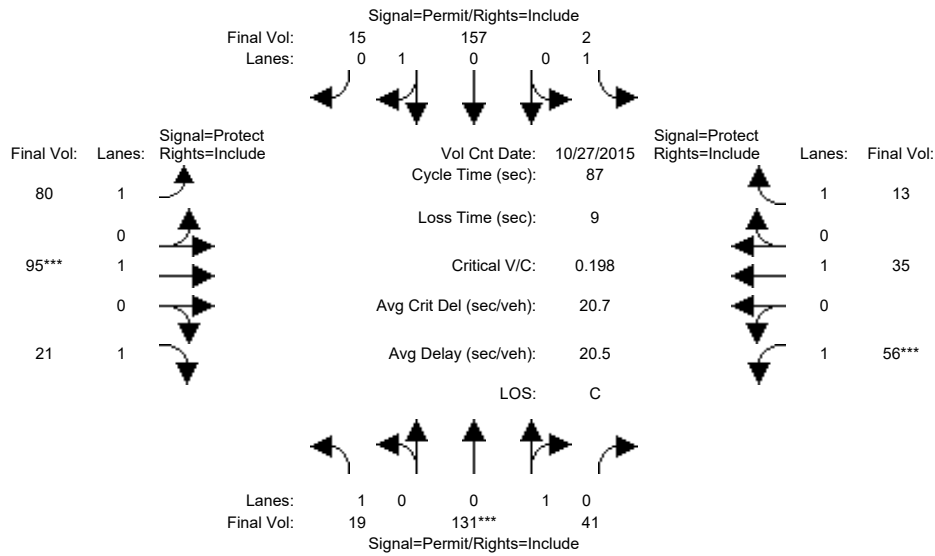
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.00	0.19	0.19	0.01	0.02	0.01	0.02	0.03	0.01
Crit Moves:				****			****				****	
Green Time:	61.0	61.0	61.0	61.0	61.0	61.0	7.0	10.0	10.0	7.0	10.0	10.0
Volume/Cap:	0.04	0.21	0.21	0.00	0.27	0.27	0.13	0.13	0.13	0.21	0.23	0.08
Delay/Veh:	4.1	4.9	4.9	3.9	5.3	5.3	39.0	35.9	35.9	40.9	37.4	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	4.1	4.9	4.9	3.9	5.3	5.3	39.0	35.9	35.9	40.9	37.4	35.2
LOS by Move:	A	A	A	A	A	A	D	D	D	D	D	D
HCM2kAvgQ:	0	3	3	0	4	4	0	1	1	1	1	0

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

Via Del Oro Data Center Development

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

Intersection #3921: SAN IGNACIO/VIA DEL ORO



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 << 5:00-6:00

Base Vol:	19	131	41	2	157	15	80	95	21	56	35	13
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:	19	131	41	2	157	15	80	95	21	56	35	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	131	41	2	157	15	80	95	21	56	35	13
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:	19	131	41	2	157	15	80	95	21	56	35	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	131	41	2	157	15	80	95	21	56	35	13
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:	19	131	41	2	157	15	80	95	21	56	35	13

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.76	0.24	1.00	0.91	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1371	429	1750	1643	157	1750	1900	1750	1750	1900	1750

Capacity Analysis Module:

Vol/Sat:	0.01	0.10	0.10	0.00	0.10	0.10	0.05	0.05	0.01	0.03	0.02	0.01
Crit Moves:	****						****			****		
Green Time:	42.0	42.0	42.0	42.0	42.0	42.0	14.8	22.0	22.0	14.1	21.2	21.2
Volume/Cap:	0.02	0.20	0.20	0.00	0.20	0.20	0.27	0.20	0.05	0.20	0.08	0.03
Delay/Veh:	11.8	13.4	13.4	11.7	13.4	13.4	33.6	26.5	24.8	33.2	25.7	25.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.8	13.4	13.4	11.7	13.4	13.4	33.6	26.5	24.8	33.2	25.7	25.2
LOS by Move:	B	B	B	B	B	B	C	C	C	C	C	C
HCM2kAvgQ:	0	3	3	0	3	3	2	2	0	2	1	0

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