Appendix I
Transportation Analysis

# 2919 S. King Road Development

Transportation Analysis 4<sup>th</sup> Submittal

PD22-009 3-18747

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## **EXECUTIVE SUMMARY**

This transportation study evaluates transportation operations and site circulation conditions for the proposed 2919 S. King Road project in the City of San José. The project site is located on the west side of S King Road approximately 300 feet south of Barberry Lane. The Project's site plan proposes to construct a warehouse totaling up to 90,023 total square-feet of building area (which includes 6,100 square-feet of Office space) on the 4.77 gross acre site. The project would redevelop the existing site which is currently vacant. The proposed site would provide up to 147 car parking spaces, 16 bicycle parking spaces, and 12 truck loading docks on-site. The site will be accessed from two (2) driveways, both along S. King Road. It should be noted that the latest site plan proposes 90,023 total square-feet of warehouse. However, for this 4<sup>th</sup> submittal, the CEQA and LTA intersection operations analysis are kept unchanged corresponding to 92,123 total square feet for a worst-case scenario.

The potential adverse effects of the project were evaluated in accordance with the standards and methodologies set forth by the City of San José. Based on the City of San José's Transportation Analysis Policy (Policy 5-1) and the 2020 Transportation Analysis Handbook, the transportation analysis report for the project includes a CEQA transportation analysis (TA) and a local transportation analysis (LTA). The CEQA transportation analysis comprises an evaluation of Vehicle Miles Traveled (VMT) which is defined in Chapter 1. The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for two (2) study intersections near the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit, bicycle, and pedestrian access.

#### **CEQA Transportation Analysis**

#### Project Vehicle Miles Traveled (VMT) Impacts and Mitigation Measures Guidelines

The proposed project was evaluated in the VMT tool assuming development of 92,123 square-feet of industrial use.

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 13.39. The proposed project (APN 670-12-015) is anticipated to generate a VMT per employee of 13.34 (excluding any VMT reduction strategies). The evaluation tool estimates that the project would not exceed the City's industrial VMT per employee threshold and would not trigger a VMT impact.

#### **Local Transportation Analysis**

#### **Project Trip Generation**

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11<sup>th</sup> Edition* (September 2021).

Per the 2020 *Transportation Analysis Handbook*, trip generation reduction credits were applied to the project including location-based mode-share and potential VMT reduction strategies. Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net new total of 146 additional daily trips, 14 AM, and 15 PM peak hour trips to the roadway network.



#### **Intersection Traffic Operations**

For informational purposes, intersection level of service operations analysis is shown for Existing, Background, and Background Plus Project Conditions.

Traffic counts for Year 2022 were determined from new turning movement counts on collected on Tuesday, 2/15/2022 for the intersection of Silver Creek Road / S. King Road – Aborn Road and on Tuesday 3/3/2022 for the intersection of Capitol Expressway / Silver Creek Road. The study intersections were assessed under Existing, Background and Background plus Project scenarios. City of San José and Valley Transportation Authority Congestion Management Program intersection level of service standards and significance thresholds were used to determine adverse effects caused by the project.

#### **Adverse Effects and Improvements**

The project is not anticipated to generate an adverse level-of-service effect to the study intersections during the Background Plus Project scenario.

S. King Road is identified as a vision zero corridor as per the 'City of San Jose – Vision Zero Action Plan'. As part of the action plan, the City has identified a series of programmed safety initiatives to be implemented along these corridors. The project will implement improvements along the project frontage, which will tie with the planline drawings prepared by the City for the S. King Road. The improvements along the project frontage which was agreed with the City is shown in Appendix G.

Per the San Jose 2025 Better Bike Plan, the City is planning to enhance the bicycle facilities within the vicinity of the project site, as such, the project would likely need to contribute or build out the planned bike facilities identified in Section 2.3 of the report. As identified in Section 2.3, some of these planned bicycle improvements are already implemented. It should be noted that final implementation and potential fair share contribution to unimplemented sections of these planned bicycle improvements would need to be coordinated between the project applicant and the City.

#### **Vehicle Site Access and Circulation**

The site will be accessed from two (2) driveway along S. King Road. The project driveway designed for truck access is 32-feet wide while the passenger vehicle access driveways is 26-feet wide. Based on associated turning templates for the given design vehicle, the wider driveway dimensions proposed on the latest site plan are recommended to provide sufficient vehicle access and circulation for entering and exiting vehicles.

The proposed driveway locations optimize sight distance, spacing for the proposed site plan and align as close as possible with the adjacent street entrances. Passenger vehicles, delivery trucks, refuse, and emergency vehicles are able to circulate within the project site without conflict.

#### Pedestrian, Bicycle, and Transit Site Access

Due to the function and operational characteristics of the proposed use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.



#### On-Site Vehicle and Bicycle Parking

Per the City's parking standard, the project site is anticipated to provide sufficient on-site vehicle and bicycle parking to meet the City's minimum parking requirement.

#### **Neighborhood Interface**

The project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding area.



## 1 INTRODUCTION

#### **1.1 Project Description**

This transportation study evaluates transportation operations and site circulation conditions for the proposed 2919 S. King Road project in the City of San José. The project site is located on the west side of S King Road approximately 300 feet south of Barberry Lane. The Project's site plan proposes to construct a warehouse totaling up to 90,023 total square-feet of building area on the 4.77 gross acre site. The project would redevelop the existing site which is currently vacant. It should be noted that the latest site plan proposes 90,023 total square-feet of warehouse. However, for this 4<sup>th</sup> submittal, the CEQA and LTA intersection operations analysis are kept unchanged corresponding to 92,123 total square feet for a worst-case scenario.

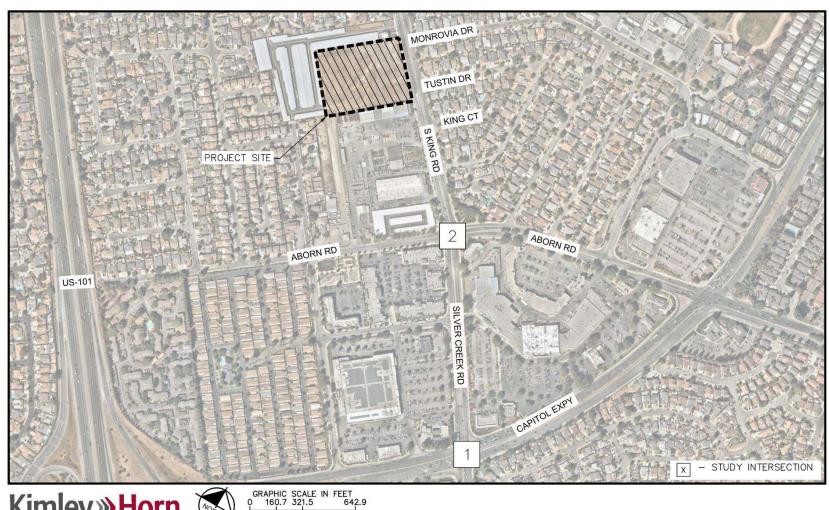
The proposed site would provide up to 147 car parking spaces, 16 bicycle parking spaces, and 12 truck loading docks on-site. The site will be accessed from two (2) driveways, both along S. King Road.

An overview map showing the project site location is shown in **Figure 1**. Kimley-Horn was retained by the project applicant to provide a traffic operations analysis for the proposed project based on the scope of work approved by the City of San José.

Based on the recently adopted Transportation Analysis Council Policy 5-1, the project will require preparation of a comprehensive Transportation Analysis (TA) per the 2020 San José Transportation Analysis Handbook. This TA report evaluates several project and transportation criteria including intersection operations, project trip generation, trip distribution, site access and circulation, sight distance, vehicle queuing, parking, bicycle, pedestrian, and transit facilities, and vehicle miles traveled (VMT).



Figure 1: Project Site Location



Kimley»Horn

PROJECT SITE MAP

2919 S KING ROAD TRANSPORTATION ANALYSIS



#### 1.2 CEQA Transportation Analysis Scope

The California Environmental Quality Act (CEQA) was enacted in 1970 to ensure environmental protection through review of discretionary actions approved by all public agencies. For the City of San José, a CEQA transportation analysis requires an evaluation of a project's potential impacts related to VMT and other significance criteria per CEQA and Senate Bill 743.

VMT is defined as the total miles of travel by a personal motorized vehicle 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 the appropriate thresholds of significance based on the project location and type of development. For 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. For an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The project's VMT is then compared to the VMT thresholds of significance established based on the average area VMT. A project located in a downtown area with higher density and a diversity of land uses is expected to have a lower project VMT than a project located in a suburban area.

#### Screening Criteria

The Transportation Analysis Handbook 2020 includes screening criteria for projects that are expected to result in less-than-significant VMT impacts. Projects that meet the screening criteria do not require a CEQA transportation analysis but may be required to provide a Local Transportation Analysis (LTA).

The proposed project, which is a warehouse development, would not meet the industrial screening criteria set forth in the City's Transportation Analysis Handbook. The City of San José VMT Evaluation Tool was used to estimate VMT impacts for the project.

#### VMT Analysis Methodology

The City has developed the San José VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic to determine whether a project would result in CEQA transportation impacts related to VMT. The City's Travel Demand Model can also be used to determine project VMT for non-residential or non-office projects, very large projects, or projects that can potentially shift travel patterns.

For this project, the CEQA transportation analysis was assessed using the San José VMT Evaluation Tool to determine the potential VMT impact from the project's description, location, land use attributes.

The project's VMT was compared to the City's existing level VMT and VMT thresholds of significance as established in Council Policy 5-1. Project VMT that exceeds the thresholds of significance will need to mitigate its CEQA transportation impact by implementing various VMT reduction strategies described below.

- 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.

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.

#### City of San José VMT Threshold

The thresholds of significance for development projects, as established in the Transportation Analysis Policy are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses. **Table 1** summarizes the City VMT thresholds of significance for development projects. For residential developments, project generated VMT that exceeds the existing citywide average VMT per capita minus fifteen (15) percent will create a significant adverse impact. For office developments, project generated VMT that exceeds the existing regional average VMT per employee minus fifteen (15) percent will also create a significant adverse impact. This project is an industrial use; therefore, the project VMT per employee that exceeds the existing regional average VMT per employee will create a significant adverse impact.

**Figure 2** and **Figure 3** shows San José heat maps identifying existing level VMT per capita for residential uses and VMT per employee for office and industrial uses respectively in the city. Developments in green-colored areas are estimated to have VMT levels below the City's threshold of significance while orange and pink-colored areas are estimated to have VMT levels above the threshold of significance.



Table 1: City of San José VMT Thresholds of Significance

Project Type	Significance Criteria	Current VMT Level	VMT Threshold
Residential Uses	Project VMT per capita exceeds existing citywide average VMT per capita minus 15 percent, or existing regional average VMT per capita minus 15 percent, whichever is lower.	11.91 VMT per Capita (Citywide Average)	10.12 VMT per Capita
General Employment Uses	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
Industrial Employment Uses	Project VMT per employee exceeds existing regional average VMT per employee.	14.37 VMT per employee (Regional Average)	14.37 VMT per employee
Retail / Hotel / School Uses	Net increase in existing regional total VMT.	Regional Total VMT	Net Increase
Public / Quasi- Public Uses	In accordance with most appropriate type(s) as determined by Public Works Director.	Appropriate levels listed above	Appripriate thresholds listed above
Mixed Uses	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	Appripriate thresholds listed above
Change of Use / Additions to Existing Development	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	Appripriate thresholds listed above
Area Plans	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	Appripriate thresholds listed above
Notes:			
VMI thresholds b	pased on City of San Jose, 2018 Transportation Analys	sis Handbook, Table :	2.



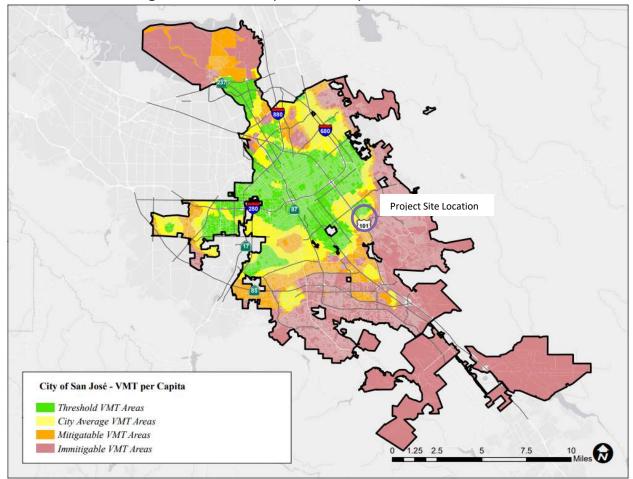


Figure 2: VMT Per Capita Heat Map for Residential Uses



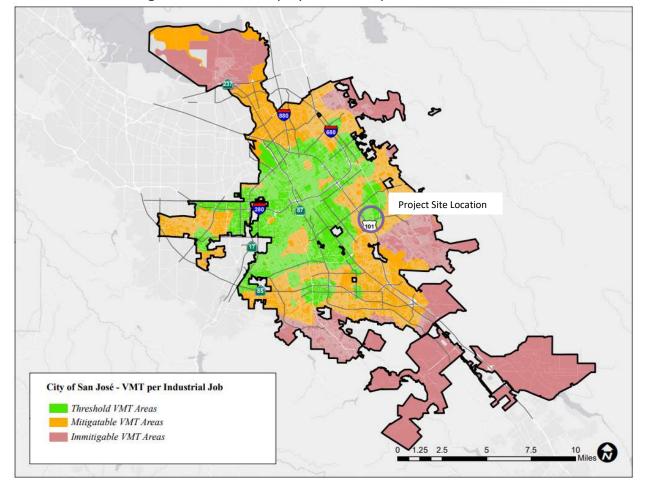


Figure 3: VMT Per Employee Heat Map for Industrial Uses

#### **1.3 Local Transportation Analysis Scope**

A Local Transportation Analysis (LTA) evaluates the effects of a development project on transportation, access, circulation, and related safety elements in the proximate area of the project. A LTA also establishes consistency with the General Plan policies and goals through the following three objectives:

- 1. Ensures that a local transportation system is appropriate for serving the types, characteristics, and intensity of the surrounding land uses;
- 2. Encourages projects to reduce personal motorized vehicle-trips and increase alternative transportation mode share;
- 3. Addresses issues related to operation and safety for all transportation modes, with trade-offs guided by the General Plan street typology.

For this project, the LTA was assessed per the guidelines established in the 2020 San José Transportation Analysis Handbook and Transportation Analysis work scope for 2919 S. King Road Warehouse dated January 26, 2022.

The LTA study to identify potential traffic adverse effects was evaluated per the standards and guidelines set forth by the City of San José and the Santa Clara Valley Transportation Authority (VTA) which administers the County Congestion Management Program (CMP). A project is required to conduct



an intersection operations analysis if the project is expected to add ten (10) or more vehicle trips per peak hour per lane to a signalized intersection that is located within half a mile of the project site. Study intersections for the project were selected in consultation with City staff and in accordance with the VTA's TIA Guidelines. The following two (2) intersections studied in this TA are listed below.

- 1. Capitol Expressway / Silver Creek Road
- 2. Silver Creek Road / S. King Road-Aborn Road

#### **Study Scenarios**

Traffic conditions for each study intersection were analyzed during the 7:00 - 9:00 AM and 4:00 - 6:00 PM peak hours of traffic which represent the most heavily congested traffic on a typical weekday. The study intersections were assessed under the following study scenarios.

- **Existing Conditions**: Existing AM and PM peak-hour traffic volumes, intersection geometry, and traffic control based on Year 2022 traffic count data.
- Background Conditions: Peak-hour traffic volumes based on Existing conditions and adding City
  Approved Trip Inventory (ATI) traffic volumes from City of San José database to the Existing
  roadway geometry and traffic control. The ATI volumes represent approved but not yet
  constructed developments in the vicinity of the project study area.
- Background Plus Project Conditions: Peak-hour traffic volumes based on Background conditions
  and adding the net vehicle trips from the proposed Silver Creek project to the Background
  roadway geometry and traffic control. The Project scenario is compared to the Background
  conditions for determining project traffic adverse effects.

#### Intersection Level-of-Service Criteria and Thresholds

Analysis of potential adverse effects at roadway intersections is based on the concept of level-of-service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS A (best) represents minimal delay, while LOS F (worst) represents heavy delay and a facility that is operating at or near its functional capacity. LOS for this study was based on the Highway Capacity Manual (HCM) 2000 methodology with TRAFFIX software. This methodology is used by the City of San José for CMP-designated intersections and determining average intersection vehicle delay measured in seconds. The City of San José does not have any formally adopted LOS standard for unsignalized intersections; LOS would generally only be used to determine the need for modification in the type of intersection control. The standards used by the City of San José to measure signalized intersection operations are summarized below in **Table 2**.



Table 2: Intersection Operation Standards at Signalized Intersections

Operations Standard	Descriptions	Average Control Delay (seconds/vehicle)
Α	Operations with very low delay occurring with favorable progress and/or short cycle lengths.	10.0 or less
В	Operations with low delay occurring with good progression and/or short cycle lengths.	Between 10.1 and 20.0
С	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	Between 20.1 and 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	Between 35.1 and 55.0
E	Operations with high delays indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	Between 55.1 and 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	Higher than 80.0

Project adverse effects are determined by comparing baseline conditions to those scenarios with the proposed Project. Adverse effects for intersections are created when traffic from the proposed Project causes the LOS to fall below the maintaining agency's LOS threshold or causes deficient intersections to deteriorate further, per the criteria indicated below.

#### City of San José LOS Threshold

The City's acceptable intersection operations standard is LOS "D" unless superseded by an Area Development Policy. An adverse effect on intersection operations occurs when the analysis demonstrates that a project would cause the operations standard at a study intersection to fall below LOS "D" with the addition of project vehicle-trips to baseline conditions.

For intersections already operating at LOS "E" or LOS "F" under the baseline conditions, an adverse effect is defined as:

- An increase in average critical delay by 4.0 seconds or more <u>AND</u> an increase in the critical volume-to-capacity (V/C) ratio of 0.010 or more; <u>OR</u>
- A decrease in average critical delay <u>AND</u> an increase in the critical V/C ratio of 0.010 or more.

#### **CMP Intersection LOS Threshold**

The County's operations standard for a CMP identified intersection is LOS "E". A project is anticipated to create a significant adverse effect on traffic conditions at a CMP signal if:

- LOS at the intersection degrades from and acceptable LOS "E" or better under baseline conditions to an unacceptable LOS F under baseline plus project conditions; <u>OR</u>
- LOS at the intersection is an unacceptable LOS "F" under baseline conditions and the addition of
  project trips causes both the critical-movement delay at the intersection to increase by four (4)
  or more seconds <u>AND</u> the volume-to-capacity ratio (V/C) to increase by one percent (0.01) or
  more.



#### **1.4 Report Organization**

This report includes a total of six (6) chapters as follows:

- Chapter 2 describes existing transportation conditions including VMT of the existing land uses in the proximity of the project, the existing roadway network, transit service, bicycle, and pedestrian facilities.
- **Chapter 3** describes the CEQA transportation analysis, including the project VMT impact analysis.
- Chapters 4, 5, and 6 describe the local transportation analysis including operations of study
  intersections, the methods used to estimate project-generated traffic, the project's effects on
  the transportation system, and an analysis of other transportation issues including site access
  and circulation, parking, transit services, bicycle and pedestrian facilities, and neighborhood
  intrusion.
- Chapter 7 provides a summary of the findings provided in the report.



## **2 EXISTING TRANSPORTATION CONDITIONS**

This chapter describes the existing conditions of the transportation system within the study area. It presents the existing land use's vehicle miles traveled (VMT) near the project and describes transportation facilities near the project site, including the roadway network, transit service, and pedestrian and bicycle facilities. The analysis of existing intersection operations is included as part of the Local Transportation Analysis (Chapters 4, 5, and 6).

#### 2.1 Vehicle Miles Traveled

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San José VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects. Based on the VMT Evaluation Tool and the project's APN, the existing VMT for industrial employment uses in the project vicinity is 14.67 per employee. The current regional average VMT for industrial employment uses is 14.37 per employee (see **Table 1**). Thus, the VMT levels of existing employment uses in the project vicinity are above the average VMT levels. Chapter 3 presents additional information on the project's VMT.

#### 2.2 Existing Roadway Network

The following local and regional roadways provide access to the project site:

**Aborn Road** travels in the east-west direction and provides access to the project site via S. King Road, as well as to various commercial businesses and residential land uses between Silver Creek Road and E. Capitol Expy. East of Silver Creek Road/S. King Road, the 4-6 lane roadway has a posted speed limit of 40 mph, provides sidewalks and Class II bike lanes. West of Silver Creek Road/S. King Road, the two-lane roadway has a posted speed limit of 25 mph, provides sidewalks but does not have bike facilities on both sides of the street. Aborn Road is designated as a City Connector Street, west of Silver Creek Road/S. King Road.

**S. King Road** is a four-lane collector street in the north-south direction that provides direct access to the project site as well as to various industrial businesses and residential land uses. A central turn lane is also provided within the vicinity of the project site. The roadway has a posted speed limit of 35 mph, provides sidewalks and Class II bike lanes on both sides of the street. The roadway is designated as a City Connector Street. Additionally, S. King Rd. in front of the project site (between McKee Rd and Capitol Expressway) is identified as a Vision Zero corridor and included in Vision Zero San José action plan.

**Silver Creek Road** is a four-lane collector street in the north-south direction that becomes S. King Road north of Aborn Road. The roadway has sidewalks and provides Class II bike lanes on both sides of the street. On-street parking is allowed along a segment south of Aborn Dr, along the west side of the street. The roadway is designated as a City Connector Street. Silver Creek Road, between Aborn Rd. and Capitol Expressway is identified as a Vision Zero corridor and is included in Vision Zero San José action plan.

**Capitol Expressway** is an eight-lane arterial in the east-west direction south of the project site. The roadway provides access to the project site as well as various commercial and industrial businesses and provides connection to Highway 101 in the north-south direction. The roadway is designated as Grand Boulevard. Near the project site, the roadway has a posted speed limit of 45 mph and has sidewalks. Bus and Car-Pool lanes are provided in either direction west of Silver Creek Road. Capitol Expressway,



between SR-87 and Jackson Avenue is identified as a Vision Zero corridor and is included in Vision Zero San José action plan.

**Highway 101** is a 10-lane freeway (Four mixed-flow lanes and one HOV lane in each direction) that connects with State Route 85 and travels in a north-south direction in the City of San José. Access to and from the project site is provided by ramp terminals at Capitol Expressway.

#### **2.3 Existing Pedestrian and Bicycle Facilities**

Pedestrian and bicycle activity within project vicinity are active along several facilities with an established pedestrian and bicycle infrastructure. Connected sidewalks at least six feet wide are available on at least one side of all major City roadways in the study area with adequate lighting and signing. At signalized intersections, marked crosswalks, Americans with Disabilities Act (ADA) standard curb ramps, and count down pedestrian signals provide improved pedestrian visibility and safety.

The Barberry Green Paseo trail is a Walkway that runs parallel to Barberry Lane between Corda Drive near Meadowfair Park and Dina Lane, north of the project site. The walkway is discontinuous currently with plans to extend the walkway along the outskirts of the park to Quimby Road.

The Coyote Creek trail is a Class I shared use pathway and one of the longest trail systems extending from the Bay to the City's southern boundary. The trail runs parallel to Coyote Creek and provides both pedestrian and bicycle access to the project site. This trail is approximately 1.3 miles from the project site and could be accessed from Capitol Expressway. At the intersection of Tuers Rd and Capitol Expressway, a grade-separated undercrossing is present for pedestrian and bike connectivity to the Coyote Creek trail.

Bicycle facilities in the area include S. King Road, Aborn Rd., and Silver Creek Road which consist of Class II bike lanes with buffered striping to separate the vehicle and bike travel way. Bicycle facilities along S. King Road, Aborn Rd., and Silver Creek Road feature green paint markings in potential conflict areas at the signalized intersections. Bicycle parking in the area is limited to private commercial and industrial lots.

Near the project site, S. King Road provides sidewalk and bicycle facilities for pedestrian and bike access. Overall, the existing pedestrian and bicycle facilities near the project have adequate connectivity and provide pedestrian and bicyclists with routes to the surrounding land uses.

The San José Better Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the project study area and the following facility improvements would benefit the project.

- Class I shared use path
  - Barberry Lane from Corda Dr. to Monterey Road to Capitol Expressway
- Class III bike boulevard
  - o Aborn Rd. from S. King Rd. / Silver Creek Road to Stallion Way
  - Monrovia Dr. from S.King Rd. to Capitol Expressway
- Class IV protected bike lanes
  - o S. King Rd. from Trade Zone Blvd. to Yerba Buena Rd.
  - o Aborn Rd. from S. King Rd. / Silver Creek Road to Gurdwara Ave.



It should be noted that along Aborn Rd. under existing conditions, Class II buffered bike lanes exists from S. King Rd. / Silver Creek Rd to Ruby Ave, and Class II bike lanes exists between Ruby Ave. and Gurdwara Ave. Aborn Road is planned to be upgraded to Class IV lanes as per the San Jose 2025 Better Bike Plan.

Additionally, under existing conditions, Class II bike lanes already exists along S. King Rd. for most of the stretch from Trade Zone Blvd. to Yerba Buena Rd.

#### **2.4 Existing Transit Facilities**

Transit services in the study area include light rail, shuttles, and buses provided by the Santa Clara Valley Transportation Authority (VTA). Per the updated February 14, 2022 service schedule, the project study area is served by the following major transit routes.

- Local Bus Route 42
  - Evergreen Valley College Santa Teresa Station
  - Local service every 30-60 minutes on weekdays and weekends
  - Nearest transit stop to project Silver Creek Road and Daniel Maloney Dr / Marsh Manor Way intersection
- Frequent Bus Route 70
  - Milpitas BART Eastridge vis Jackson
  - Local service every 15-20 minutes on weekdays and weekends
  - Nearest transit stops to project at S. King Rd. / Tustin Dr. and S. King Rd. / Vanport Dr.

\*Note that the routes and service schedules described above are based on February 14, 2022 schedules. At the time that this report was prepared, COVID 19 had affected routes and service schedules and is not reflective of typical operations.

Most regular bus routes operate on weekdays from early in the morning (5:00 AM to 6:00 AM) until late in the evening (10:00 PM to midnight) and on weekends from early morning (5:00 AM to 6:00 AM) until mid-evening (8:00 PM to 11:00 PM). The study area is served by bus route 42 and 70 in the VTA system which provide local and regional bus service for commuters between Evergreen College - VTA Santa Teresa Light Rail station and Milpitas BART - Eastridge Transit Center – Capitol Station.

Few bus stops along S. King Road are equipped with benches, however shelters and bus pullout amenities are not provided within ½ mile walking distance from the project site. The closest transit stops by the project are located is at the northeast corner of S. King Road/ Tustin Drive in the northbound direction and at S. King Road/Vanport Drive in both directions.

#### **2.5 Existing Intersections**

The traffic study to identify potential traffic adverse effects was evaluated per the standards and guidelines set forth by the City of San José and the Santa Clara Valley Transportation Authority (VTA) which administers the County Congestion Management Program (CMP). Study intersections for the project were selected in consultation with City staff and in accordance with the VTA's TIA Guidelines. The two (2) intersections studied in this TA are listed below.

- 1. Capitol Expressway / Silver Creek Road
- 2. Silver Creek Road / S King Road- Aborn Road



#### 2.6 Existing Field Observations

Field observations did not reveal any significant traffic related congestion within the project study area. During the AM and PM peak hours, some traffic queueing was observed along Capitol Expressway in either direction, however, the queues were observed to clear during the green phase. No queueing was observed at the intersection of Silver Creek Road / S. King Road – Aborn Dr. during the AM and PM peak hours.

#### 2.7 Evergreen East Hills Development Policy Area (EEHDP)

The original Evergreen Development Policy (OEDP) was adopted in August 1976 to address the issues of flood protection and limited traffic capacity in the EDP area, which constituted substantial constraints to development in the EDP Area. The area south of Story Road and east of Highway 101 has limited gateway streets to get in and out the EDP Area of San Jose. All vehicular trips to and from Evergreen pass though these few gateway streets, creating the potential for severe traffic congestion.

The EEHDP intends to promote the long-term vitality of the Evergreen-East Hills Area by linking together new development with supporting transportation infrastructure. In exchange for enabling more development capacity, the Policy provides a mechanism to require commensurate traffic impact fees in order to construct transportation system investments. The guiding principles for EEHDP are as follows:

- 1. All new development in EEHDP area should be sustainable, be high quality, and improve the overall livability of the area
- 2. New residential developments should create housing opportunities for a wide range of household types and income levels
- 3. Infrastructure and services should support the planned levels of residential and non-residential development
- 4. New development in transit corridors should incorporate transit-oriented development concepts, and all development should support vibrant land uses linked by various transportation modes and community amenities

#### The EEHDP Land Use Policies are intended to:

- Guide development to appropriate locations within the Evergreen-East Hills Development Policy Area
- Provide appropriate flexibility for limited new development capacity
- Maintain the current location of the Urban Growth Boundary
- Facilitate infill development within the Urban Growth Boundary
- Facilitate walking, bicycling, and transit use
- Promote a diversity of housing options within neighborhoods
- Protect, enhance, and/or restore natural features

The EEHDP provides traffic capacity for a "Development Pool" of 500 residential units, 500,000 square feet of retail, and 75,000 square feet of commercial office. The project is located within the EEHDP area and to be consistent with the EEHDP, the project would need to pay a Traffic Impact Fee (TIF) for the equivalent office from the generated peak-hour trips. A discussion on the TIF associated with the project is provided in Section 5.6 of the report.



## **3 CEQA TRANSPORTATION ANALYSIS**

This chapter describes the CEQA transportation analysis, including the VMT threshold of significance, the project-level VMT impact analysis results, and the mitigation measures that are necessary to reduce a VMT impact.

#### 3.1 Project VMT Analysis

A VMT analysis was used to evaluate the Silver Creek project VMT levels against the appropriate thresholds of significance established in Council Policy 5-1. Section 3.4 and Table 1 of the *Transportation Analysis Handbook* identifies screening criteria to exempt certain components of a project that are expected to result in a less-than significant VMT impact from the project description, characteristics, and/or location; However, the project does not satisfy the small infill screening criteria of 30,000 industrial s.f. of gross floor area or less for VMT analysis exemption.

The City of San José VMT Evaluation Tool was used to estimate VMT impacts for the project. The VMT Evaluation Tool calculates the per-capita and per-employee VMT for the half-mile radius surrounding the project site, as calculated using the City's travel demand model and adjusted to the parcel level. For projects that would trigger a VMT impact, VMT reduction strategies such as introducing TDM or additional multimodal infrastructure can be used to mitigate the VMT impact which is estimated from research literature and case studies.

As per latest Site Plan, the project proposes to construct a warehouse totaling up to 90,023 total square-feet. This land use total includes a portion of the site dedicated to office square-foot space which is typical of a warehouse land use. The proposed project designated approximately 6,100 square-feet or 6.8% of the total square footage as office land use, which is comparable to other recent warehouse developments in the City of San Jose.

However, for this 4<sup>th</sup> submittal, the Project VMT analysis is kept unchanged, and the proposed project was evaluated in the VMT tool assuming development of 92,123 square-feet of industrial use, with a designated office space of approximately 15,000 square-feet or 16.3% of the total square footage. An office-to-office warehouse square footage comparison summary of recent developments is presented in the **Appendices**.

Therefore, although 15,000 square feet of the total development is office use, the whole project is analyzed as an industrial land use for VMT impact. **Table 3** summarizes the VMT analysis.

Table 3: Project VMT Analysis

Scenario	Industrial VMT per Employee	Exceeds City Threshold and VMT Impact?
City VMT Threshold	14.37	N/A
Existing Conditions	13.39	No
Project Conditions	13.34	No

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 13.39. The proposed project (APN 670-12-015) is anticipated to generate a VMT per employee of 13.34 (excluding any VMT reduction strategies). The evaluation tool estimates



that the project would not exceed the City's industrial VMT per employee threshold and would not trigger a VMT impact.

A summary of the project VMT outputs/results using the City's Evaluation Tool is presented in **Figure 4** and the **Appendices**.

#### **3.2 Cumulative Impact Analysis**

Projects must also demonstrate consistency with the Envision San Jose 2040 General Plan to address cumulative impacts. If a project is determined to be consistent with the General Plan, the project will be considered part of the cumulative solution to meet the General Plan's long-range goals and it will result in a less-than-significant cumulative impact. Factors that contribute to a determination of consistency with the General Plan include a project's density, design, and conformance to the goals and policies set forth in the General Plan.

Based on the project description and intended use, the proposed development is consistent with the goals of the General Plan. Therefore, the project is anticipated to result in a less-than-significant cumulative impact.



Figure 4: San José VMT Evaluation Tool Report (Project Conditions)

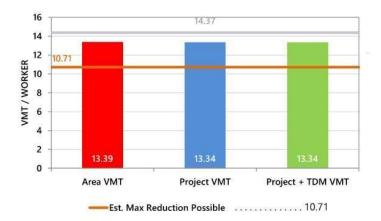
OJECT:			
	King Rd Kings Rd	Tool Version: Date: e: Suburb with Multifamily Housing	2/29/2019 10/3/2022
the American was a second		A STATE OF THE STA	
Proposed Parking S ND USE:	paces venicie	es: 159 Bicycles: 16	
Residential:		Percent of All Residential Units	
Single Family Multi Family Subtotal	0 DU 0 DU 0 DU	Extremely Low Income ( ≤ 30% MFI)  Very Low Income ( > 30% MFI, ≤ 50% MFI)  Low Income ( > 50% MFI, ≤ 80% MFI)	0 % Affordabl 0 % Affordabl 0 % Affordabl
Office: Retail:	0 KSF 0 KSF		
Industrial:	92.12 KSF		
IT REDUCTION STR	ATEGIES		
Tier 1 - Project Ch	aracteristics		
Increase Reside	ntial Density		
-		al Acres in half-mile buffer)	6 6
Existing Ac	5		0.41 0.44
Integrate Afford	dable and Below Ma	rket Rate	
		its	0 %
			0 %
			0 %
Increase Emplo		E1 E	47
		cial Acres in half-mile buffer)	17 18
	ENGLANDED AND THE POST		1/5:



#### 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.





## **4 LTA PROJECT DESCRIPTION**

This chapter describes the local transportation analysis including the method by which project traffic is estimated through trip generation, trip distribution, and volume assignment.

#### 4.1 Project Site Plan

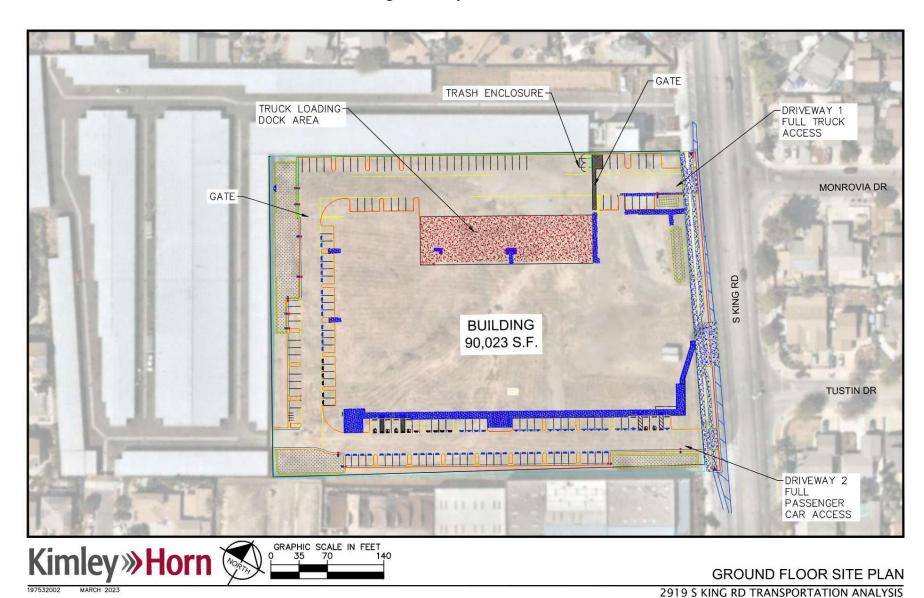
Based on the most recent site plan provided by the project applicant, the project site is located on the west side of S King Road approximately 300 feet south of Barberry Lane. The Project's site plan proposes to construct a warehouse totaling up to 90,023 total square-feet of building area on the 4.77 gross acre site. The project would redevelop the existing site which is currently vacant.

The proposed site would provide up to 147 car parking spaces, 16 bicycle parking spaces, and 12 truck loading docks on-site. The site will be accessed from two (2) driveways, both along S. King Road. However, for this 4<sup>th</sup> submittal, the trip generation estimate for the LTA intersections analysis are kept unchanged corresponding to 92,123 total square feet for a worst-case scenario

The project site plan is presented in **Figure 5** and the **Appendices**.



Figure 5: Project Site Plan





#### **4.2 Project Trip Generation**

#### **Project Site Vehicle Operations**

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (September 2021).

A trip is defined as a single or one-directional vehicle movement in either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e. one to and one from the site). Daily, AM, and PM peak hour trips for the project were calculated with average trip rates.

The project description and future tenant for the industrial use is under negotiation at this time; however, the speculative project building is a warehouse for storage. Due to the project description and the unknown future tenants for the industrial use, the ITE 150 Warehousing land use was conservatively applied to the proposed development.

#### **Baseline Vehicle Trips**

Baseline vehicle trips for the proposed project (excluding trip adjustments) are anticipated to generate a gross total of 158 daily trips, 16 AM peak hour trips, and 17 PM peak hour vehicle trips. Of the AM peak hour trips, approximately 12 trips will be inbound to the project and 4 trips will be outbound from the project. For the PM peak hour trips, approximately 5 trips are inbound while 12 trips are outbound.

#### **Vehicle Trip Reductions**

Per the per the 2020 *Transportation Analysis Handbook*, an internal capture reduction can be applied based on vehicle-trip reduction rates from the *VTA Transportation Impact Analysis Guidelines*. An internal capture reduction was not applied to the project, since it does not contain an applicable mixed land use.

A location-based mode share trip reduction was applied. This adjustment is a function of multimodal connectivity and accounts for greater mode share for projects located in urban or transit developed areas. From Table 5 and Table 6 of the *Transportation Analysis Handbook*, the project location is designated as a "Suburb with Multi-family housing" area with a vehicle mode share of 92 percent for industrial land uses. Therefore, a 8% mode share trip reduction was assumed to the project.

Per the *Transportation Analysis Handbook*, identified VMT reduction strategies will also encourage reductions in vehicle-trips generated by the project. For commercial and industrial projects, it is assumed that every percent reduction in per-employee VMT is equivalent to one percent reduction in peak hour vehicle trips. The project is not anticipated to incorporate any City identified VMT reduction strategies; therefore, a VMT vehicle-trip reduction was not applied to the project.

Total net vehicle trips for the proposed project (including trip adjustments) are to be 146 daily trips, 14 AM peak hour trips, and 15 PM peak hour vehicle trips. Of the AM peak hour trips, approximately 11 trips will be inbound to the project and 3 trips will be outbound from the project. For the PM peak hour trips, approximately 4 trips will be inbound, while 11 trips are outbound.



#### **Existing Use and Pass-By Trip Credits**

The existing site is currently a vacant parcel. Therefore, an existing use or pass-by trip credit was not applied to the project.

#### Net Vehicle Project Trips

Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net total of 146 additional daily trips, 14 AM, and 15 PM peak hour trips to the roadway network. **Table 4** provides a summary of the proposed trip generation and trip reductions/credits.

Table 4: Project Trip Generation

			TOTAL	AM F	PS	PM F	PEAK	ΓRI	PS		
LAND USE / DESCRIPTION	PRO.	PROJECT SIZE		TOTAL	IN	1	OUT	TOTAL	IN	1	OUT
Trip Generation Rates (ITE)				A Co							
Warehousing [ITE 150]	Per	1,000 Sq Ft	1.71	0.17	77%	/	23%	0.18	28%	/	72%
1. Baseline Vehicle-Trips											
2919 S. Kings Rd.	92.123	1,000 Sq Ft	158	16	12	/	4	17	5	/	12
	line Project	Vehicle-Trips	158	16	12	/	4	17	5	1	12
2. Location-based Mode Share Adjustments Suburb w/ MFH Reduction (Mode Share)	-8%		(12)	(2)	(1)	/	(1)	(2)	(1)	/	(1)
	cle-Trips Aft	er Reduction	146	14	11	1	3	15	4	1	11
	Net Project	Vehicle-Trips	146	14	11	1	3	15	4	1	11
Notes:			1 1								
Project Land Uses assumed based on propose	d site plan fr	om HPA Arch	itecture								
Daily, AM, and PM trips based on average land	d use rates fr	om the Instit	ute of Tra	affic Engin	eers 7	Trip	Gene	eration :	11th E	di	tion
A 8% Mode Share Reduction from San Jose Tra in an "Suburban with MultiFamily Homes" are		Analysis Han	dbook 20	020 was a	pplied	ds	ince th	ne proje	ct is lo	oca	ted



#### **4.3 Project Trip Distribution and Assignment**

Due to the nature of the proposed development, vehicle project trips are anticipated to access the US 101 regional freeway. Trip distribution and assignment assumptions for the project were based on the project driveway location, the freeway ramp location, community characteristics, and professional engineering judgement. The project trips to and from the site are anticipated to access the following regional facilities and destinations with the estimated trip distribution percentages as shown in **Table 5**.

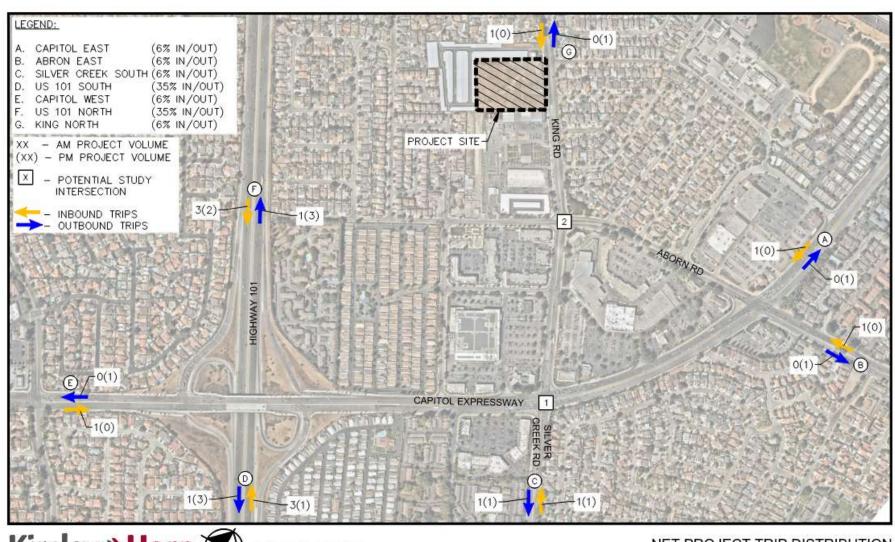
Table 5: Project Trip Distribution

Location	Roadway Origin / Destination	Inbound Trip Distribution (%)	Outbound Trip Distribution (%)
Α	Capitol East	6%	6%
В	Aborn East	6%	6%
С	Silver Creek South	6%	6%
D	US 101 South	35%	35%
E	Capitol West	6%	6%
F	US 101 North	35%	35%
G	S. King North	6%	6%

The net project trip assignments and distributions are presented in **Figure 6** and **Figure 7**. The trip assignment shown represents the shortest paths to and from the project site under ideal traffic conditions.



Figure 6: Net Project Trip Distribution



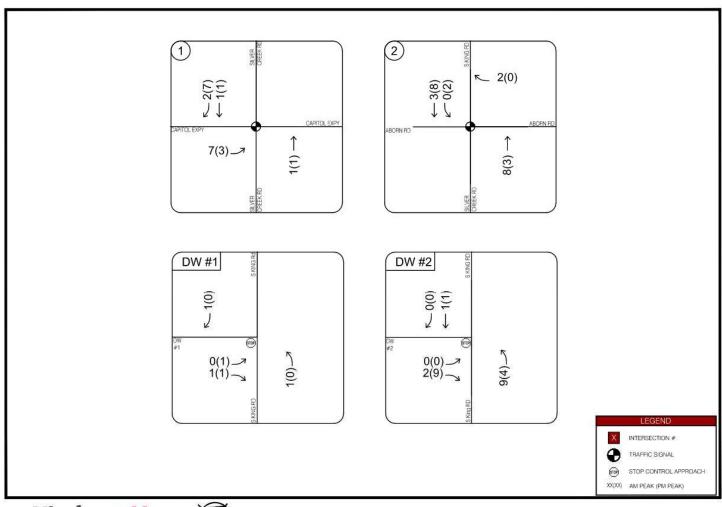
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NET PROJECT TRIP DISTRIBUTION AND TRIP ASSIGNMENT

2919 S KING ROAD TRANSPORTATION ANALYSIS



Figure 7: Net Project Trip Assignment



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NET PROJECT PEAK HOUR VOLUMES

2919 S KING ROAD TRANSPORTATION ANALYSIS



## **5 LTA INTERSECTION OPERATIONS**

This chapter describes the local transportation analysis including intersection operations analysis for: existing, background, and project conditions; intersection vehicle queuing analysis; and mitigation measures for any adverse effects to intersection level of service caused by the project.

#### **5.1 Existing Conditions Analysis**

Traffic counts for Year 2022 were determined from new turning movement counts on collected on Tuesday, 2/15/2022 for the intersection of Silver Creek Road / S. King Road – Aborn Road and on Tuesday 3/3/2022 for the intersection of Capitol Expressway / Silver Creek Road. Peak hour volumes during each intersection's respective peak were conservatively used in this analysis. Existing intersection lane geometry and peak hour turning movement volumes are shown in **Figure 8** and **Figure 9**, respectively.

Traffic operations were evaluated at the study intersections under Existing conditions, and the results of the analysis are presented in **Table 6**. New intersection turning-movement counts and TRAFFIX output sheets are provided in the **Appendices**.

Table 6: Intersection Operations Summary for Existing Conditions

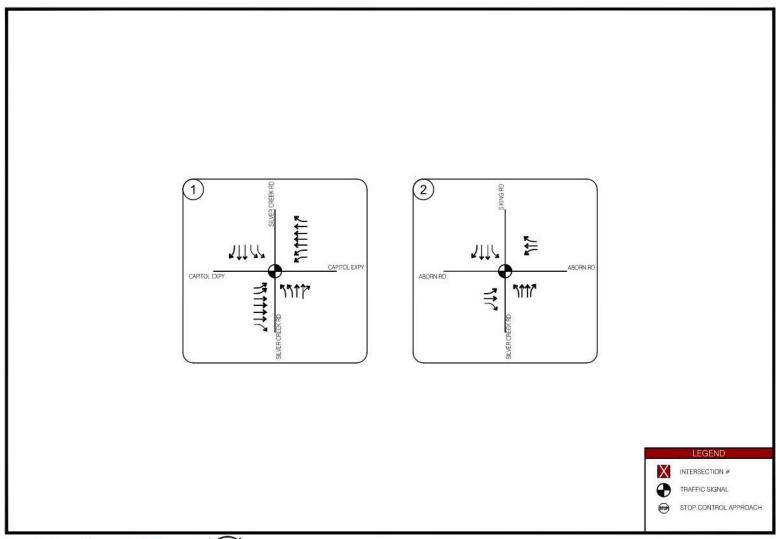
				Existing Conditions								
		LOS		AM Peak				PM Peak				
#	# Intersection	Criteria	Control	LOS	Delay (sec) <sup>1</sup>	v/c Ratio	Crit. Delay (sec)	LOS	Delay (sec) <sup>1</sup>	v/c Ratio	Crit. Delay (sec)	
1	Capitol Expy. / Silver Creek Rd.*	Е	Signal	D	40.0	0.713	45.5	D	42.6	0.667	55.9	
2	S.Kings Rd. / Silver Creek Rd. / Aborn Rd.	D	Signal	С	26.3	0.339	30.7	С	22.4	0.247	19.4	

<sup>\*-</sup>CMP Intersection

The study intersections are anticipated to operate at acceptable LOS during the AM and PM peak hour for the Existing scenario.



Figure 8: Existing Intersection Lane Geometry





MARCH 2023

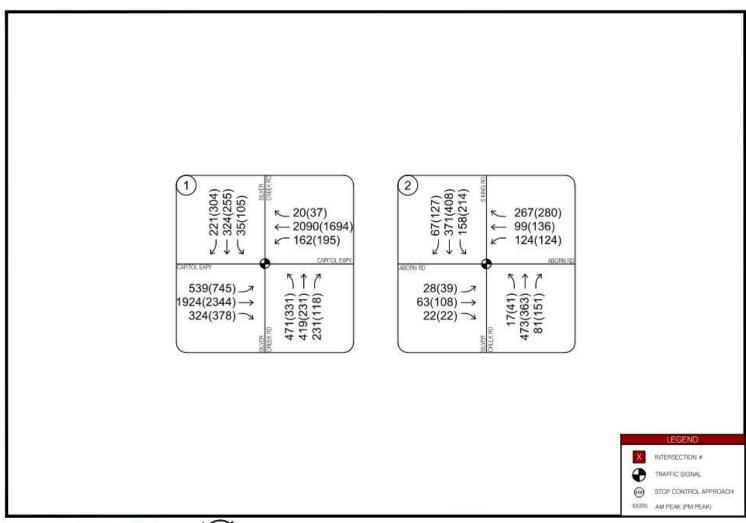
19732002

**EXISTING INTERSECTION LANE GEOMETRY** 

2919 S KING ROAD TRANSPORTATION ANALYSIS



Figure 9: Existing Traffic Volumes





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EXISTING CONDITION PEAK HOUR VOLUMES

2919 S KING ROAD TRANSPORTATION ANALYSIS



#### **5.2 Background Conditions Analysis**

Traffic generated from other approved projects in the project study area were obtained from the City of San José Approved Trip Inventory (ATI) database attached in the **Appendices**. These ATI traffic volumes were added to the existing traffic counts to generate the Background baseline scenario and include the following local projects.

- NSJ Legacy North San Jose
- EEHDP Evergreen Office/Industrial
- EEHDP Evergreen Residential
- EEHDP Evergreen Retail
- EDP Zone D Evergreen Residential
- EDP Zone H Evergreen Residential
- EDP Zone J Evergreen Residential
- EDP Zone M Evergreen Residential
- EDP Zone N Evergreen Residential
- EDP Zone P Evergreen Residential
- EDP Zone Q Evergreen Residential
- EDP Zone S Evergreen Residential
- PDC81-03-017 (3-06434) Yerba Buena & Fowler Campus Industrial
- PDC13-009 (IND) (3-18407) Legacy Communication Hill
- PDC13-009 (RES) (3-18407) Legacy Communication Hill
- PDC13-009 (RET) (3-18407) Legacy Communication Hill
- PDC99-11-086 (3-13395) Murillo Av (N/S), Murillo Church and School

Background peak hour turning movement volumes are shown in **Figure 10**. Traffic operations for the study intersections under Background conditions are shown below in **Table 7**.

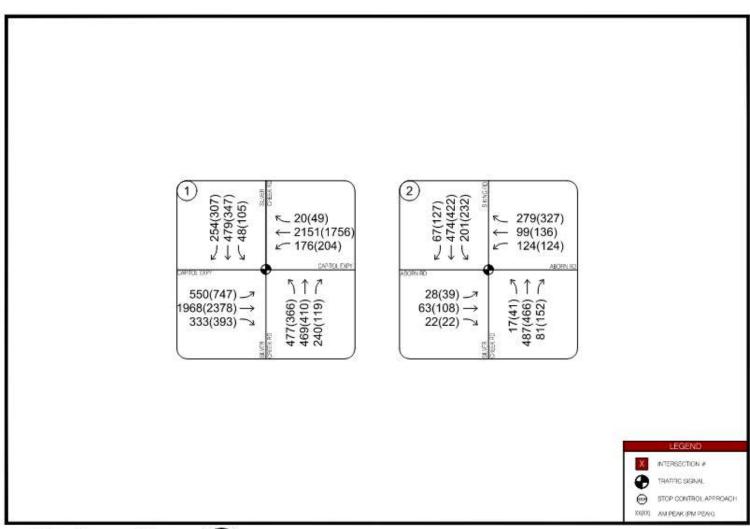
Table 7: Intersection Operations Summary for Background Conditions

				Background Conditons								
		LOS			AM	Peak			PM	Peak		
#	Intersection	Criteria	Control	LOS	Delay (sec) <sup>1</sup>	v/c Ratio	Crit. Delay (sec)	LOS	Delay (sec) <sup>1</sup>	v/c Ratio	Crit. Delay (sec)	
1	Capitol Expy. / Silver Creek Rd.*	Е	Signal	D	43.4	0.801	52.4	D	46.2	0.716	59.1	
2	S.Kings Rd. / Silver Creek Rd. / Aborn Rd.	D	Signal	С	26.4	0.370	31.8	С	29.9	0.430	33.0	

<sup>\*-</sup>CMP Intersection

The study intersections are anticipated to operate at acceptable LOS during the AM and PM peak hour for the Background scenario.

Figure 10: Background Traffic Volumes





BACKGROUND CONDITION PEAK HOUR VOLUMES



#### **5.3 Background Plus Project Conditions Analysis**

Traffic operations were evaluated at the study intersections and new project driveways under Background Plus Project conditions based on Background conditions and adding the net vehicle trips from the proposed project to the Background roadway geometry and traffic control. It should be noted that the latest site plan proposes 90,023 total square-feet of warehouse. However, for this 3<sup>rd</sup> submittal, the LTA intersection operations analysis is kept unchanged corresponding to 93,123 total square feet for a worst-case scenario. The net project traffic volumes were incorporated from the Trip Generation and Trip Distribution described in Section 4 of this report. Traffic operations for the study intersections and the project driveways under Project conditions are shown below in **Table 8** and **Figure 11**.

Table 8: Intersection Operations Summary for Background Plus Project Conditions

			Background Plus Project Conditions										
1		LOS Criteria	AM Peak										
#	Intersection		LOS	Delay (sec) <sup>1</sup>	Delay Var	v/c Ratio	v/c Var	Crit. Delay (sec)	Crit. Delay Var	Impact			
1	Capitol Expy. / Silver Creek Rd.*	Е	D	43.5	0.1	0.804	0.003	52.6	0.2	NO			
2	S.Kings Rd. / Silver Creek Rd. / Aborn Rd.	D	С	26.4	0.0	0.373	0.003	31.7	-0.1	NO			

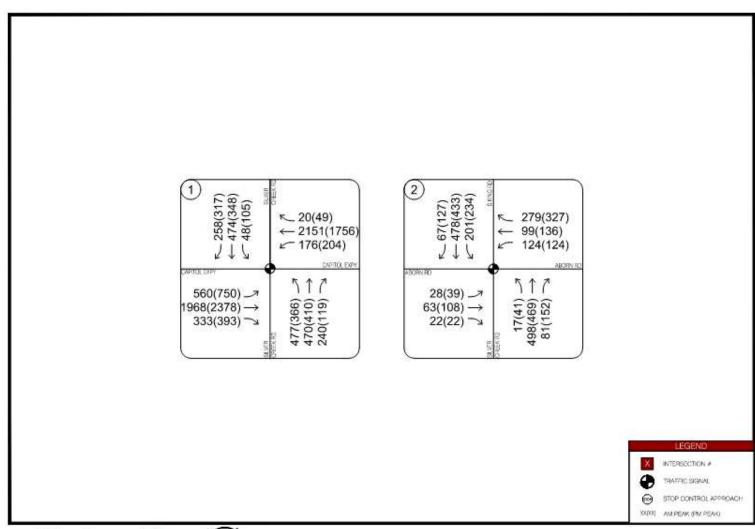
#		LOS		В	ackgrou		s Project I Peak	Conditi	ons	
	Intersection	Criteria	LOS	Delay (sec) <sup>1</sup>	Delay Var	v/c Ratio	v/c Var	Crit. Delay (sec)	Crit. Delay Var	Impact
1	Capitol Expy. / Silver Creek Rd.*	Е	D	46.2	0.0	0.717	0.001	59.2	0.1	NO
2	S.Kings Rd. / Silver Creek Rd. / Aborn Rd.	D	С	29.9	0.0	0.431	0.001	32.9	-0.1	NO

<sup>\*-</sup>CMP Intersection

The study intersections and project driveways are anticipated to operate at acceptable LOS during the AM and PM peak hour, and the project is not anticipated to create a significant traffic adverse effect under Background Plus Project conditions.



Figure 11: Background Plus Project Traffic Volumes





BACKGROUND PLUS PROJECT PEAK HOUR VOLUMES



#### **5.4 Signal Warrant Analysis**

Based on City's direction, peak hour signal warrant analysis was conducted at the intersection of S. King Road / Monrovia Drive. Traffic count data was collected at the intersection on 17 May 2022 during the AM (7-9) and PM (4-6) peak periods. The count data for the intersection is attached in Appendix C.

Peak hour signal warrant #3 from the California Manual on Uniform Traffic Control Devices (CAMUTCD) was evaluated for both Existing (2022) and Background Plus Project Conditions to determine if a signal is warranted at the study intersection. The results of the peak hour signal warrant #3 is shown in Figure 12 below. The AM and PM peak hours were analyzed using the following assumptions:

#### S. King Road

- Major Street 4 Lanes
- AM Approach Volumes (Total of Both Approaches): 1,399 vehicles (Existing) & 1,539 vehicles (Background Plus Project Conditions)
- PM Approach Volumes (Total of Both Approaches): 1,400 vehicles (Existing) & 1,615 vehicles (Background Plus Project Conditions)

#### Monrovia Drive

- Minor Street one lane
- AM Approach Volumes (Higher-Volume approach): 182 vehicles (Existing & Background Plus Project Conditions)
- PM Approach Volumes (Higher-Volume approach): 61 vehicles (Existing & Background Plus Project Conditions)

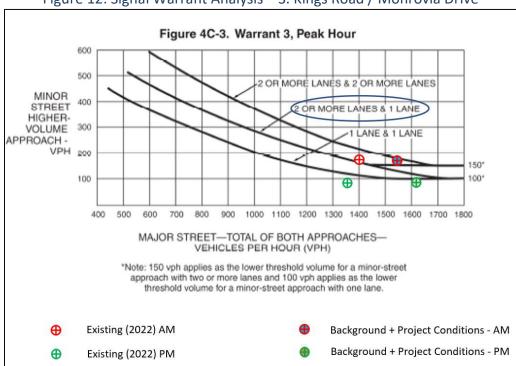


Figure 12: Signal Warrant Analysis – S. Kings Road / Monrovia Drive



As shown in Figure 12 above, the intersection of S. Kings Road / Monrovia Drive meets the Peak Hour Warrant #3 requirements during the AM peak hour under Existing (2022) and continue to meet the requirements under Background Plus Project Conditions. During the PM peak hour, the intersection does not meet the Peak Hour Warrant #3 during both Existing (2022) and Background Plus Project Conditions.

The City currently does not have plans to signalize the Monrovia Drive and S. King Road intersection. The S. King Road planline plans the intersection to be left-in only along the northbound and southbound directions. The project could contribute toward a potential future enhanced pedestrian crosswalk with Rectangular Rapid-Flashing Beacon (RRFBs) at the intersection.

#### **5.5 Intersection Queue Analysis**

Select study intersections near the project site were evaluated for left-turn vehicle queuing capacity and storage analysis for each study scenario and summarized in **Table 9**.

It was observed that sufficient storage has been provided for left turn movements at the study intersections with the exception of the southbound left turn lane at the Silver Creek Rd. / S. King Rd. / Aborn Rd. intersection, where the queues were observed to exceed the storage length during the Existing, Background and Background Plus Project Conditions, during the AM peak hour and during the Background and Background Plus Project Conditions, during the PM peak hour. The project would add 2 PM peak-hour trips to the southbound left-turn pocket at Silver Creek Rd. / S. King Rd. / Aborn Rd. intersection. The project is not anticipated to increase the vehicle queue and create an adverse effect to the study intersection.



Table 9: Left Turn Queue Analysis

			A	M PEA	K HOUF	₹					F	M PEA	K HOUF	₹		
DESCRIPTION	#1 CAF	PITOL E CREE	XPY./S K RD.	ILVER			R CREE D./ABOI		#1 CAF	PITOL E CREE		ILVER			R CREE D./ABOI	
	NBL	SBL	EBL	WBL	NBL	SBL	EBL	WBL	NBL	SBL	EBL	WBL	NBL	SBL	EBL	WBL
Existing Conditions																
95% Queue (car/ln)	12	1	13	4	0	5	1	4	10	3	11	6	1	3	1	3
95% Queue (ft/In)	300	25	325	100	0	125	25	100	250	75	275	150	25	75	25	75
Number of Turn Lanes	2	2	2	2	1	1	1	1	2	2	2	2	1	1	1	1
Storage (ft/ln)	310	290	615	250	100	100	65	150	310	290	615	250	100	100	65	150
Total Storage (ft/ln)	620	580	1230	500	100	100	65	150	620	580	1230	500	100	100	65	150
Sufficient Storage?	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Background Conditions																
95% Queue (car/ln)	13	1	14	5	0	6	1	4	11	3	19	6	1	7	1	4
95% Queue (ft/In)	325	25	350	125	0	150	25	100	275	75	475	150	25	175	25	100
Number of Turn Lanes	2	2	2	2	1	1	1	1	2	2	2	2	1	1	1	1
Storage (ft/ln)	310	290	615	250	100	100	65	150	310	290	615	250	100	100	65	150
Total Storage (ft/ln)	620	580	1230	500	100	100	65	150	620	580	1230	500	100	100	65	150
Sufficient Storage?	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES
<b>Background Plus Project Conditions</b>																
95% Queue (car/ln)	13	1	14	5	0	6	1	4	11	3	19	6	1	7	1	4
95% Queue (ft/In)	325	25	350	125	0	150	25	100	275	75	475	150	25	175	25	100
Number of Turn Lanes	2	2	2	2	1	1	1	1	2	2	2	2	1	1	1	1
Storage (ft/ln)	310	290	615	250	100	100	65	150	310	290	615	250	100	100	65	150
Total Storage (ft/ln)	620	580	1230	500	100	100	65	150	620	580	1230	500	100	100	65	150
Sufficient Storage?	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES
Project Impact?	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

The 95<sup>th</sup> percentile outbound queue at the project driveways are anticipated to be up to 25-feet (1 car length) for the Project scenario during the AM and PM peak. This maximum queue would extend into proposed drive aisle. Vehicles exiting the proposed driveway would be able to access S. King Rd. when there are sufficient gaps generated between platooning vehicles.

From the trip distribution presented in Section 4, the total gross vehicles exiting the project site for the PM peak hour is 11 trips while the gross outbound trips at a single project driveway is up to 9 PM trips. This maximum outbound trip rate at the project driveway is equivalent to a rate of 1 vehicle every 6 to 7 minutes. The driveway vehicle queue is not expected to create an adverse effect to roadway on-site traffic operations.

#### **5.6 Adverse Effects and Improvements**

This section discusses significant transportation project adverse effects identified under Project conditions as well as planned roadway improvements. Per City guidelines in the 2020 Transportation Analysis Handbook, proposed mitigation measures to address negative adverse effects at a study intersection should prioritize improvements related to alternative transportation modes, parking measures, and/or TDM measures with secondary improvements that increase vehicle capacity to the transportation network.



#### **Project Intersection Adverse Effects**

Based on City and CMP intersection operation threshold criteria described in Section 1, the project is <u>not</u> anticipated to generate an adverse effect to the study intersections during the Background Plus Project scenarios.

#### City Identified Bicycle / Pedestrian / Traffic Calming Improvements

S. King Road is identified as a vision zero corridor as per the 'City of San Jose – Vision Zero Action Plan'. As part of the action plan, the City has identified a series of programmed safety initiatives to be implemented along these corridors. Project's potential fair share contribution for these programmed safety initiatives would need to be coordinated between the project applicant and the City.

The City of San Jose is also working on 'Complete Streets Plan" study. This Complete Street Project aims to make King Road, one of San Jose's highest bus ridership corridors, a safer and more inviting place to walk, bike and take transit. The project will also focus on improving transit access and reliability for historically under resourced East San Jose neighborhoods and improve connections to key regional transportation hubs. Project supports goals of San Jose's Better Bike Plan, Vision Zero Plan, VTA's Pedestrian Access to Transit Plan as one of San Jose's top corridors in need of safety and transit reliability improvements. S. King Road is identified as one of the corridors and the City is currently working on conceptual planline drawings, which indicates Class IV protected bike lanes and a raised median island along S. King Road.

The project will implement or provide a monetary contribution towards improvements along the project frontage, which will tie with the planline drawings prepared by the City for the S. King Road. The improvements along the project frontage which was agreed with the City is shown in Appendix G.

Per the San Jose 2025 Better Bike Plan, the City is planning to enhance the bicycle facilities within the vicinity of the project site, as such, the project would likely need to contribute or build out the planned Class IV bike lanes along the project frontage identified in Section 2.3 of the report. As identified in Section 2.3, some of these planned bicycle improvements are already implemented. It should be noted that final implementation and potential fair share contribution to unimplemented sections of these planned bicycle improvements would need to be coordinated between the project applicant and the City.

#### **City Identified Transit Improvements**

The project is not anticipated to generate an adverse effect to the existing transit network during the Project scenario.

#### Evergreen East Hills Development Policy Area (EEHDP) Traffic Fees

With the previous permit application (PD16-037) for the site, the project is located within the EEHDP area and would still be subject to pay a TIF for the equivalent office from generated peak-hour trips.

 As per information provided by the City, the 2023 TIF is \$17,759 per 1,000 square feet of Commercial or Office space. The project generates a net 15 PM peak hour trips and ITE rates of 1.44 trips/1,000 square feet (based on the latest ITE 11<sup>th</sup> Edition Trip Generation Manual), the project is equivalent to 10,417 square feet of commercial or office space.



• The TIF estimated for the project is approximately \$184,989. It should be noted that this fee is subject to an annual escalation on January 1<sup>st</sup> per the Engineering News-Record Construction Cost Index for San Francisco. The project will be required to pay the current rate in effect at the time the Public Works Clearance is issued.



#### **6 LTA SITE ACCESS AND CIRCULATION**

This chapter describes the local transportation analysis including site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, construction operations, and neighborhood interface.

#### **6.1 Driveway Site Access**

It is anticipated that the project site will operate during normal business hours (8AM to 5PM). A majority of employees will access the site during the AM and PM peak. Truck deliveries to/from the project site is anticipated to occur throughout the day and most of the truck trips will occur outside of AM and PM peak.

Site access and circulation for the project is based on the latest site plan prepared by the project applicant and is included in the **Appendices**. The project provides on-site parking spaces for commercial delivery trucks and employee staff. The at-grade parking lots are accessed by the following driveways:

- Driveway 1 (North End of Project Site) at S. King Rd.
  - Full access for passenger and truck vehicles
  - 32-feet wide driveway
- Driveway 2 (South End of Project Site) at S. King Rd.
  - Right In/Right Out access for passenger vehicles
  - 26-feet wide driveway

Driveway 1 is aligned with Monrovia Drive and Driveway 2 is at an off-set of approximately 37 feet from Tustin Drive.

A driveway (approximately 26 feet) to the adjacent self-storage site is also proposed in the south-west corner of the project site. This driveway is for surface drainage easement with the adjacent property and no vehicle access is proposed via this driveway. Under existing conditions, a wall separates the self-storage parcel and the project parcel.

Per City guidance, driveways should be a minimum of 150 feet from any intersection, and the project satisfies this standard. The proposed driveway locations optimize sight distance and spacing for the proposed site plan. To improve vehicle sight distance of approaching pedestrians and bicycles on S. King Road, it is recommended to provide low clearance landscaping between the back of curb on both sides of the driveway.

Per City Municipal Code 20.90.100 and Table 20-220, the minimum width of the proposed two-way drive aisle is 26-feet. The parking lot drive aisles for staff parking are dimensioned 26-feet wide while the drive aisles for truck deliveries are dimensioned 32-feet wide.

Project driveway 1 is designed for passenger vehicle and truck access and is dimensioned 32-feet wide to allow heavy vehicles into the loading dock area. Project driveway 2 is designed for passenger vehicle access and satisfy the 26-feet wide City standard width cut. The on-site parking spaces as per the Site Plan are dimensioned 9-feet by 16-feet with approximately 2-feet overhang for Standard car spaces and 9-feet by 16 feet with approximately 2-feet overhang for Compact Car spaces, both of which does satisfy City's parking standards.



The drive aisles from driveway 1 and driveway 2 connect at the loading dock area on the north side of the site. However, truck access to the Project site will be through driveway 1 (north end of project site).

Vehicles accessing the project driveways would be allowed to make turns in and out the site when there are sufficient vehicle gaps along S. King Road. From the queue analysis results summarized in Section 5, inbound vehicle queues and delays are not expected to be significant issues. For outbound vehicles, on-site vehicle queues are expected during the AM and PM peak due to a combination of inherent unpredictability of vehicle arrivals at driveways, and the random occurrence of gaps in traffic; however, these conditions are typical of driveways in industrial areas.

#### **6.2 Passenger Vehicle Access and Circulation**

Vehicle maneuverability and access for the parking area was analyzed using AutoTURN software which measures design vehicle swept paths and turning through simulation and clearance checks. A passenger car design from the American Association of State Highway and Transportation Officials (AASHTO) was assessed for the internal parking area.

Analysis using the AASHTO template revealed that passenger vehicles could adequately access the driveways on S. King Road, maneuver through the parking lot, and park in the stalls without conflicting into other vehicles or stationary objects. The proposed layout provides sufficient vehicle clearance.

#### **6.3 Heavy Vehicle Truck Access and Circulation**

Delivery trucks and heavy vehicles are currently prohibited from stopping or parking along S. King Road Road along the project frontage. All delivery activity for the project would occur on-site in the designated loading areas.

Per City Municipal Code 20.90.410, a building intended for use by a manufacturing plant, storage facility, warehouse facility, goods display facility, retail store, wholesale store, market, hotel, hospital, mortuary, laundry, dry cleaning establishment, or other use having a floor area of 10,000 square-feet or more shall provide a minimum of one (1) off-street loading space, plus one additional such loading space for each 20,000 square-feet of floor area. The project provides at least 12 truck loading docks on-site and satisfies the City requirement.

The STAA truck based on AASHTO and the Caltrans Highway Design Manual was assumed as the maximum size delivery truck that would be allowed at the project driveway. Fire apparatus and garbage trucks were also checked for site access, and these vehicle dimensions were based on NCHRP 659 – Guide for the Geometric Design of Driveways.

STAA delivery trucks would be able to maneuver on S. King Road adjacent to the project site and access the designated truck driveway 1 to load/unload and exit the site. Turning templates for this delivery vehicle indicate that the proposed 32-feet wide driveway 1 on the north end of the project site provides sufficient vehicle access to and from the project site without conflict.

Project driveway 2 with a proposed 26-feet driveway, will be used as employee entrance/exit and provides sufficient vehicle access and circulation for entering and exiting vehicles.



The AM and PM peak hour truck volume is approximately 2 and 3 trucks respectively, or one truck every 20 to 30 minutes, that will access any of the project driveway. Inbound stacking space of more than 50-feet is provided between the proposed gate and the project driveway designed for truck access.

Garbage and recycling bins are anticipated to be located near the loading docks in a designated trash enclosure nearest to driveway 1 along S. King Road. Waste collection vehicles would be able to enter the project driveway to pick up bins and exit the site without conflict.

In the event of an emergency, it is assumed that fire apparatus vehicles will stage in the project parking lots, along the north, west and south side of the building. Existing fire hydrants on S. King Road along the project frontage and within the project site provides direct fire access for emergency personnel. The project driveways are 26-feet wide minimum, provide at least 10-feet high clearance, and satisfies the 20-foot horizontal and 10-foot- vertical minimum access clearances from the 2016 CA Fire Code. Gate control for fire access will be provided with Knox boxes.

**Figure 13** through **Figure 16** show site access and vehicle turn templates at the project driveway and onsite parking area for the design vehicles described above.



Figure 13: Passenger Vehicle Access



Kimley»Horn

PASSENGER VEHICLE ACCESS



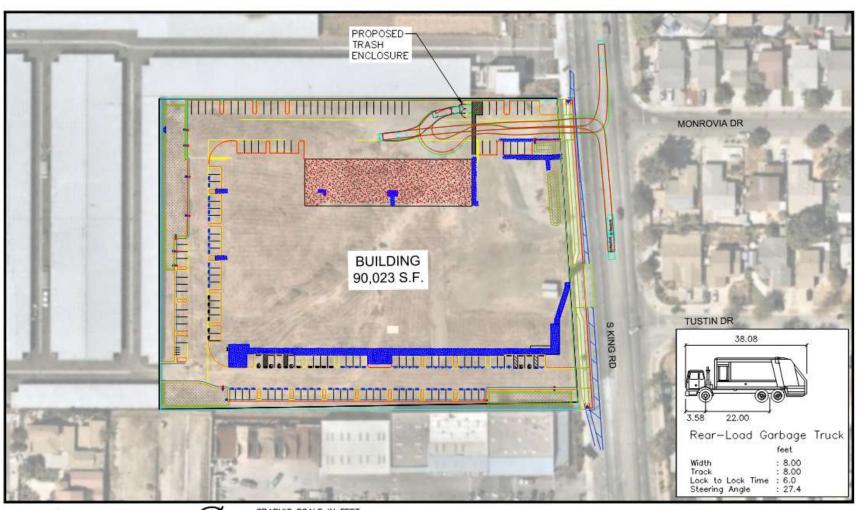
Figure 14: Delivery Truck Vehicle Access



**DELIVERY TRUCK VEHICLE ACCESS** 



Figure 15: Garbage Truck Access

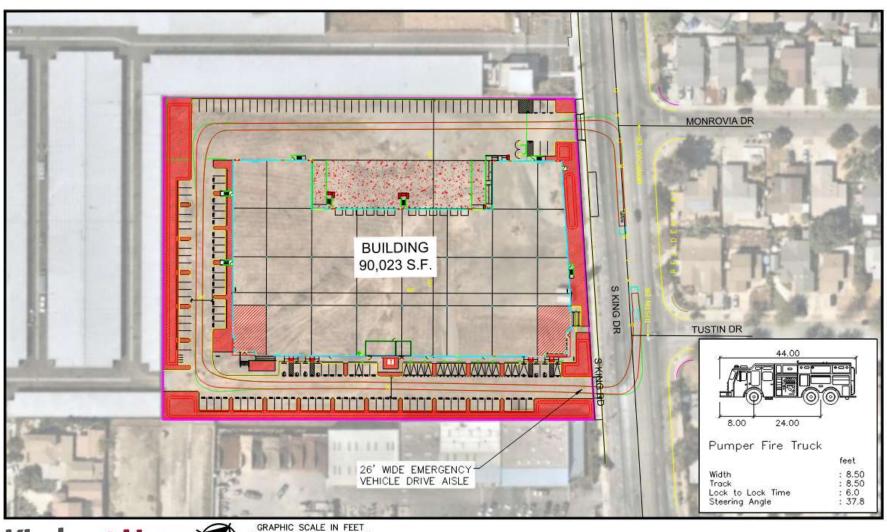




GARBAGE TRUCK VEHICLE ACCESS



Figure 16: Fire Truck Access



Kimley»Horn

FIRE TRUCK VEHICLE ACCESS



#### **6.4 Vehicle Sight Distance Analysis**

A preliminary stopping sight distance (SSD) and intersection sight distance (ISD) analysis was conducted to determine the feasibility of the proposed project driveway location. The AASHTO methodology was used in this analysis. The sight distance needed under various assumptions of physical conditions and driver behavior is directly related to vehicle speeds and to the resultant distances traversed during perception-reaction time and braking.

Stopping sight distance is defined as the sum of reaction distance and braking distance. The reaction distance is based on the reaction time of the driver while the braking distance is dependent upon the vehicle speed and the coefficient of friction between the tires and roadway as the vehicle decelerates to a complete stop. This sight distance analysis indicates the minimum visibility that is required for an approaching vehicle to stop safely if a vehicle from the project driveway enters or exits the approaching road. The driver should also have an unobstructed view of the intersection, including any traffic-control devices, and sufficient lengths along the intersecting road to permit the driver to anticipate and avoid potential collisions.

For vehicles entering S. King Road from the proposed project driveway, the AASHTO method evaluates sight distance from a vehicle exiting the driveway to a vehicle approaching from either direction. The intersection sight distance is defined along intersection approach legs and across their included corners known as departure sight triangles. These specified areas should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. Intersection sight distance is measured from a point 3.5-feet above the existing grade (driver's eye) along the potential driveway to a 3.5-foot object height in the center of the approaching lane on the roadway. A vehicle setback in a stopped position from the edge of shoulder was assumed for determining intersection sight distance.

#### **Project Driveway Sight Distance**

Minimum sight distance criteria for the potential driveways along the study roadways was determined from the AASHTO Geometric Design of Highways and Streets 7th Edition (Green Book). For the purposes of this analysis, a design speed of 40 mph (35 mph posted speed limit) was assumed along S. King Road. AASHTO standard time gap variables for passenger cars stopped on the proposed project driveways were used for Case B2 (right-turn), however, for Case B1 (left-turn), time gap was increased by 0.5 seconds to account for central dual turn lane. Based on the existing traffic control, minimum sight distance was calculated for the following scenarios:

- Stopping Sight Distance on S. King Road
- Intersection Sight Distance Case B Stop control at the proposed project driveways
  - o Case B1 Left turn from the minor road
  - Case B2 Right turn from the minor road

Minimum SSD and ISD values were obtained from Table 9-7 and Table 9-9 of the AASHTO Green Book. A site visit was taken to measure the available sight distance and departure sight triangles at the proposed driveway locations. From a 5-foot setback from the edge of travel way, the measured available sight distance varies in each direction of S. King Road driveways. **Table 10** summarizes the intersection and stopping sight distance at the project driveways.



Table 10: Project Driveway Sight Distance

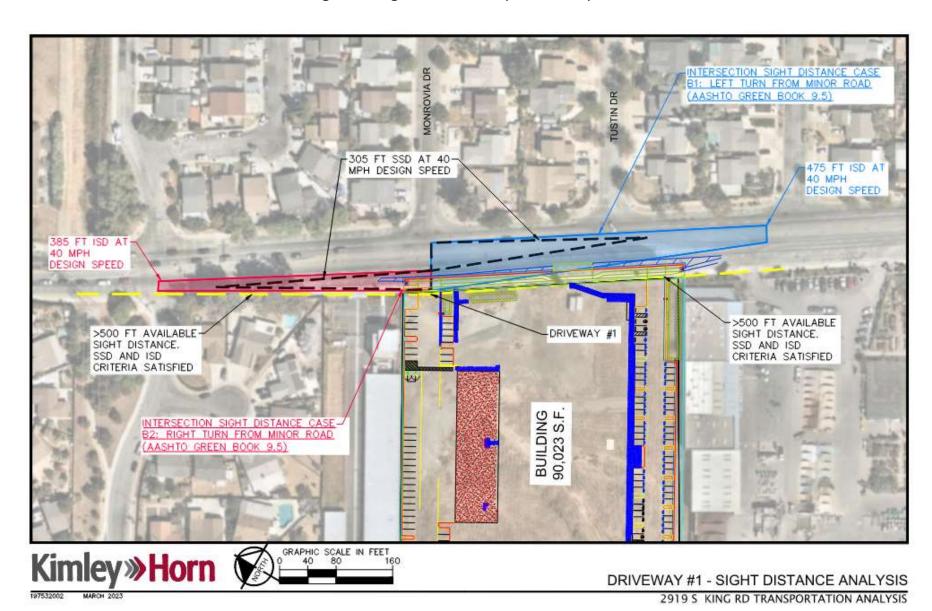
Туре	Design Speed (MPH)	Required Sight Distance (ft)	Actual Sight Distance (ft)	Sufficient Sight Distance?	
:	S. King Road (	<b>Project Driveway</b>	1)		
SSD on Primary Road	40	305	>500	Yes	
ISD Case B1 (Left Turn)	40	475	>500	Yes	
ISD Case B2 (Right Turn)	40	385	>500	Yes	
	S. King Road (	<b>Project Driveway</b>	2)		
SSD on Primary Road	40	305	>500	Yes	
ISD Case B1 (Left Turn)	40	475	>500	Yes	
ISD Case B2 (Right Turn)	40	385	>500	Yes	

The proposed project driveway locations satisfy the minimum stopping sight distance required for all approaches on S. King Road. Vehicles on the road will have sufficient sight distance to react and stop safely if a vehicle from the project driveway enters or exits the road. Vehicles entering the City streets from the project driveway will also have sufficient intersection sight distance to make a left or right turn onto the road per AASHTO scenarios.

Overall, the proposed project driveway locations are feasible and provide sufficient sight distance for traffic conditions. To ensure that exiting vehicles can see bikes and vehicles traveling on the roadway, no parking striped with red curb should be established immediately adjacent to the project driveways. An exhibit comparing the design and measured available stopping and intersection sight distances is shown in **Figure 17** and **Figure 18**.



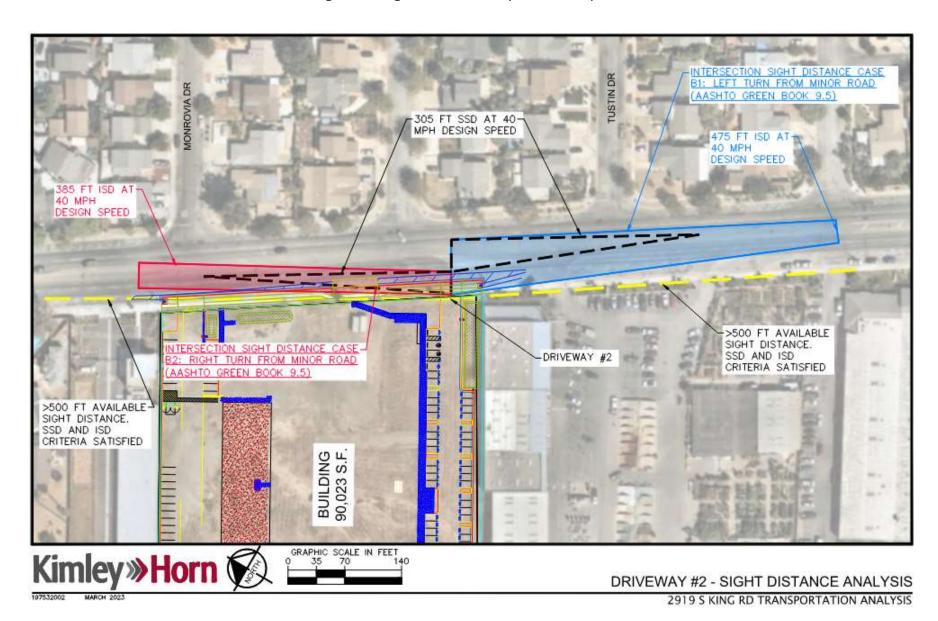
Figure 17: Sight Distance Analysis-Driveway #1



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Figure 18: Sight Distance Analysis-Driveway #2





#### 6.5 Bicycle, Pedestrian, and Transit Access

The project will provide on-site pedestrian and bicycle improvements and provide transit access to the existing facilities along S. King Road within the vicinity of the project site. On-site pedestrian and bicycle improvements include marked crosswalks and bike racks for parking. Access to transit facilities within the vicinity of the project site is provided via existing network of sidewalks and crosswalks.

As stated in Section 2, the existing network of sidewalks and crosswalks in the study area are adequate with connectivity and walkable routes to nearby bus stops, retail, and other points of interest in the immediate project area. In addition, the closest transit stops by the project site are located at the northeast corner of S. King Road / Tustin Drive in the northbound direction and at S. King Road / Vanport Drive in both directions, which are both less than quarter a mile away. As for bicycle connectivity, the Class II buffered bike lanes along S. King Road (north of Aborn Road), Aborn Road (east of S. King Road/Silver Creek Road) and Silver Creek Road (south of Aborn Road) provides bicycle facilities in the vicinity of the project site.

Due to the function and operational characteristics of the proposed industrial use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

The project will add a new southbound bus stop (with bus pad and bench) along the project frontage on the far-side of the S. King Road and Monrovia Drive. Per coordination with the City of San Jose Public Works and DOT departments, the frontage along the project will include a 4' wide landscape park strip, a 5' wide raised bike path, an additional 4' wide landscape park strip and a 6' wide pedestrian sidewalk. The landscape park strips and raised bike path will meander around the proposed bus stop. This section will encroach into the existing roadway approximately 8'-10' along the frontage.

#### 6.6 Vehicle and Bicycle Parking

Per the Chapter 20.90.060, Table 20-190, and Table 20-210 of the San José Municipal Code, as per the latest site plan, the proposed project land uses are required to provide the following minimum off-street parking:

- Offices, research and development (6,100 square feet total gross floor area)
  - One (1) vehicle parking space per 300 -square feet of total gross floor area
  - One (1) bicycle parking space per 4,000-square feet of total gross floor area
  - One (1) motorcycle parking space for every 10 code-required auto parking spaces
- Warehouse (83,923 square feet total gross floor area)
  - Two (2) vehicle parking spaces minimum for warehouses under 5,000-square feet of total gross floor area
  - Five (5) vehicle parking spaces minimum for warehouses between 5,000 and 25,000square feet of total gross floor area
  - One (1) vehicle parking space per 5,000-square feet of total gross floor area for warehouses greater than 25,000-square feet
  - One (1) bicycle parking space per 10 full-time employees
  - One (1) shower for warehouses between 85,000 and 425,000-square feet



One (1) motorcycle parking space for every 10 code-required auto parking spaces

Based on these City ratios, the project is required to provide a minimum total of 40 off-street vehicle parking spaces and 9 bicycle parking spaces for the proposed industrial use.

The project site plan proposes a total parking supply of 147 vehicle spaces to accommodate tenant employees and a total bicycle parking supply of 16 spaces.

The project site plan is anticipated to provide sufficient vehicle and bicycle parking per the City's offstreet parking requirement. **Table 11** summarize the vehicle and bicycle parking requirements for the project.

Table 11: Project Parking Summary

GUIDELINE SOURCE	PARKING TYPE	LAND USE	PARKING STANDARD PER GUIDELINE	PROJECT SIZE	VEHICLE PARKING (# SPACES)	BICYCLE PARKING (# SPACES)
San Jose	Vehicle	Warehouse	2 vehicle spaces for under 5,000 SQFT 5 vehicle spaces for under 25,000 SQFT 1 vehicle space per 5,000 SQFT for over 25,000 SQFT	83,923	19	-
Municipal Code		Office (General Business)	1 vehicle space per 300 SQFT	6,100	21	-
Code	Bicycle	Warehouse	1 bicycle space per 10 full time employees	75	-	8
		Office (General Business)	1 bicycle space per 4,000 SQFT	6,100	-	2
			Total Parking Req	uirement	40	10
			Proposed Parki	ng Supply	147	16
			Sufficient	Parking?	YES	YES
NOTES:						
SQFT = Squa	re Feet; GF	A = Gross Floor	Area;			
Proposed pa	arking sup	ply based on pro	ject description from applicant			
Parking req	uirements	based on San Jos	se Municipal Code			

#### **6.7 Construction Operations**

During project construction, the existing curb, gutter, and sidewalk along the project frontage would be widened and replaced. A Traffic Management Plan (TMP) should be developed for construction activities at the site. Prior to construction, the contractor should place temporary signs indicating closed sidewalk facilities, install a temporary screened fence around the work area, protect existing features/utilities, and repair any damaged improvements within public right of way per City of San José requirements.

Pedestrians and bicyclists would potentially not be able to travel on the west side of S. King Road next to the project during construction and would need to use the existing facilities on the opposite side of the street. Vehicles in the southbound direction along S. King Road near the project may be restricted to a single lane during construction. The contractor should install appropriate MUTCD traffic control devices to warn approaching vehicles of temporary lane closures and lane merges prior to the project site.



It is assumed that a temporary construction vehicle parking and stage construction area would be provided on the project site. This potential parking area would require the contractor to obtain necessary approval, right of entry, and permits with the City and property owners prior to construction.

#### **6.8 Neighborhood Interface**

The proposed project is in the existing industrial district in the City; however, several residential neighborhoods are located within the vicinity of the project site. The LeyVa Middle School is located at Monrovia Dr. / Corda Dr., is a public school within a half mile of the project site. Despite this proximity to the project, most students access this school by using public transit or by vehicle via Monrovia Dr.; therefore, the project is not anticipated to create an adverse effect to the existing school operations in the surrounding area.

On-street parking in the surrounding roadway network is prohibited along S. King Road. From the parking analysis, the project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area.

From recent site visits and field observations, sidewalk and curb returns are provided in the area. The existing sidewalks in the area are at least four-feet wide and have either rolled or raised concrete curbs. ADA compliant curb ramps are also provided in the area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding neighborhood area.



#### **7 CONCLUSIONS AND RECOMMENDATIONS**

It should be noted that the latest site plan proposes 90,023 total square-feet of warehouse. However, for this 4<sup>th</sup> submittal, the CEQA and LTA intersection operations analysis are kept unchanged corresponding to 92,123 total square feet for a worst-case scenario. The conclusions and recommendations section corresponds to 92,123 total square feet.

#### Project Vehicle Miles Traveled (VMT) Impacts and Mitigation Measures

The project consists of industrial land use and does not meet the screening criteria for VMT analysis exemption as a small infill project of 30,000 square-feet of total gross floor area or less per City guidelines. The proposed project was evaluated in the VMT tool assuming development of 92,123 square-feet of industrial use.

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 13.39. The proposed project (APN 670-12-015) is anticipated to generate a VMT per employee of 13.34 (excluding any VMT reduction strategies). The evaluation tool estimates that the project would not exceed the City's industrial VMT per employee threshold and would not trigger a VMT impact.

#### **Project Trip Generation**

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11<sup>th</sup> Edition* (September 2021).

Per the 2020 *Transportation Analysis Handbook*, applicable trip generation reduction credits were applied to the project. Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net new total of 146 additional daily trips, 14 AM, and 15 PM peak hour trips to the roadway network.

#### **Intersection Traffic Operations**

Traffic counts for Year 2022 were determined from new turning movement counts on collected on Tuesday, 2/15/2022 for the intersection of Silver Creek Road / S. King Road – Aborn Road and on Tuesday 3/3/2022 for the intersection of Capitol Expressway / Silver Creek Road. The study intersections were assessed under Existing, Background and Background plus Project scenarios. City of San José and Valley Transportation Authority Congestion Management Program intersection level of service standards and significance thresholds were used to determine adverse effects caused by the project.

#### **Adverse Effects and Improvements**

The project is not anticipated to generate an adverse level-of-service effect to the study intersections during the Background Plus Project scenario.

S. King Road is identified as a vision zero corridor as per the 'City of San Jose – Vision Zero Action Plan'. As part of the action plan, the City has identified a series of programmed safety initiatives to be implemented along these corridors. Project's potential fair share contribution for these programmed safety initiatives would need to be coordinated between the project applicant and the City.



Per the City's Complete Street Guidelines and functional classification of City Connector Street, S. King Road is planned to be improved to include wider bike/pedestrian facilities and removal of the existing two-way central turn lane. These proposed improvements would not impact project traffic movement in and out of project driveways. It should be noted that the final implementation and potential fair share contribution to this planned roadway improvement would need to be coordinated between the project applicant and the City.

Per the San Jose 2025 Better Bike Plan, the City is planning to enhance the bicycle facilities within the vicinity of the project site, as such, the project would likely need to contribute or build out the planned bike facilities identified in Section 2.3 of the report. As identified in Section 2.3, some of these planned bicycle improvements are already implemented. It should be noted that final implementation and potential fair share contribution to unimplemented sections of these planned bicycle improvements would need to be coordinated between the project applicant and the City.

#### **Vehicle Site Access and Circulation**

The site will be accessed from two (2) driveway along S. King Road. Project driveways designed for truck access are 32-feet wide while passenger vehicle access driveways are 26-feet wide. Based on associated turning templates for the given design vehicle, the wider driveway dimensions proposed on the latest site plan are recommended to provide sufficient vehicle access and circulation for entering and exiting vehicles.

The proposed driveway locations optimize sight distance and spacing for the proposed site plan. Passenger vehicles, delivery trucks, refuse, and emergency vehicles are able to circulate within the project site without conflict.

#### **Signal Warrant Analysis**

The intersection of S. King Road and Monrovia Drive meets the Peak Hour Warrant #3 requirements during the AM peak hour under Existing (2022) and continue to meet the requirements under Background Plus Project Conditions. During the PM peak hour, the intersection does not meet the Peak Hour Warrant #3 during both existing (2022) and Background Plus Project Conditions.

The City currently does not have plans to signalize the Monrovia Drive and S. King Road intersection. The S. King Road planline plans the intersection to be left-in only along the northbound and southbound directions. The project could contribute toward a potential future enhanced pedestrian crosswalk with RRFBs at the intersection.

#### Pedestrian, Bicycle, and Transit Site Access

Due to the function and operational characteristics of the proposed use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

#### On-Site Vehicle and Bicycle Parking

Per the City's parking standard, the project site is anticipated to provide sufficient on-site vehicle and bicycle parking to meet the City's minimum parking requirement.



#### Neighborhood Interface

The project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding area.



### **8 APPENDICES**

Appendices A -Project Site Plan

Appendices B – San José VMT Evaluation Tool Summary Report

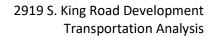
Appendices C – Intersection, Roadway, and Freeway Traffic Counts

Appendices D – San José Approved Trip Inventory

Appendices E – TRAFFIX Intersection Operations Analysis

Appendices F – Warehouse Office Space Comparison

Appendices G – Project Frontage Improvements to tie with S. King Road Vision Zero Planline Concepts



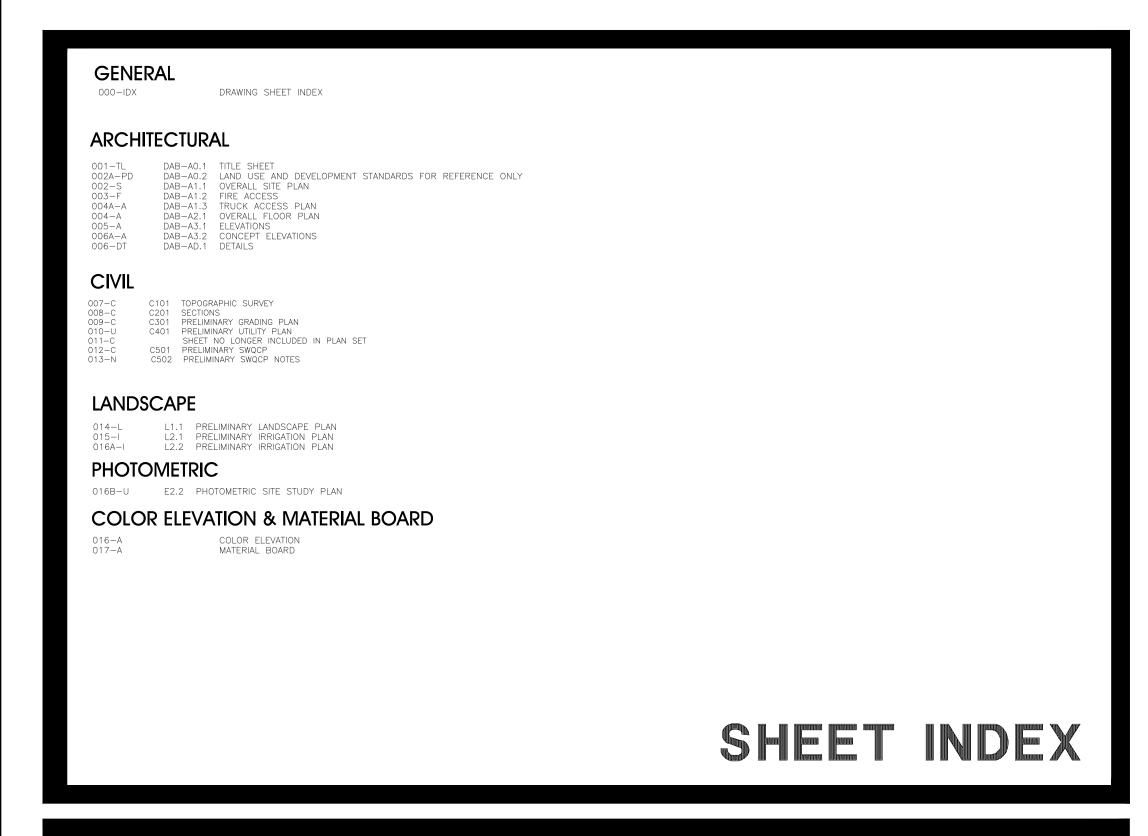


Appendices A – Project Site Plan

# 2919 SOUTH KING

San Jose

SITE DEVELOPMENT PERMIT FILE NUMBER PD22-009





## **PROPERTY OWNER**

XEBEC REALTY PHONE: 562-284-5005 CONTACT: STEVEN CHRISTIE

## APPLICANT'S REPRESENTATIVE

600 GRAND AVE, STE 302 OAKLAND, CA 94610 TEL: 949-862-2128 ATTN: DEBIE TRIANI

#### 2919 S KING RD SAN JOSE, CA 95122

**ADDRESS OF THE PROPERTY** 

## **ASSESSOR'S PARCEL NUMBER**

## LEGAL DESCRIPTION

SEE CIVIL PLANS

## PROJECT DATA

CONSTRUCTION TYPE : III B OCCUPANCY TYPE ACCESSORY OCCUPANCY B SPRINKLER SYSTEM : YES, ESFR : UNLIMITED PER CBC 507.4 ALLOWABLE AREA actual area ALLOWABLE STORY PER CBC 507.4 ACTUAL STORY

ALLOWABLE HEIGHT PER ZONING CODE : 50' ACTUAL BUILDING HEIGHT : SEE TABULATION

## PROJECT DESCRIPTION

NEW CONSTRUCTION OF 90,023 SF WAREHOUSE INCLUDING

PROJECT REPRESENTATIVES

In s.f. 207,878 s.f. In acres 4.77 ac **BUILDING AREA** Office -1st Floor 3,200 s.f. Office - 2nd Floor 2,900 s.f. 83,923 s.f. Warehouse 90,023 s.f. Footprint 87,123 s.f. FLOOR AREA RATIO ( 1.5 MAX ) AUTO PARKING REQUIRED Office: < incidental 15% 106,619 s.f. / 5,000 s.f. 18 stalls AUTO PARKING PROVIDED Standard ( 9' x 18' ) 67 stalls Accessible Standard Accessible Van 3 stalls EV Capable (40% reach code) 59 stalls EVSE ( 10% reach code ) 15 stalls - Standard 13 stalls - Accessible EVSE 1 stalls - Accessible Van EVSE 1 stalls 147 stalls LOADING SPACE REQUIRED First 10,000 s.f. Plus 1 additional for each 20,000 s.f. **BICYCLE PARKING REQUIRED** Warehouse ( 1/20 employee; min 5% CALGF 8 stalls 16 stalls BICYCLE PARKING PROVIDED 8 stalls 16 stalls MOTORCYCLE PARKING REQUIRED Code required auto parking / 10 2 stalls MOTORCYCLE PARKING PROVIDED ZONING ORDINANCE FOR CITY Planned Development MAXIMUM BUILDING HEIGHT ALLOWED Height - 50' LANDSCAPE REQUIREMENT Percentage - to be verify Front / Street side Side / Rear Building/Parking / Driveway Building - 15' PROJECT DATA Parking / Driveway - 15' 0', 25' from R zone

SITE AREA



600 Grand Ave, suite 302 email: hpa@hparchs.com



Owner:

**EXEBEC** 

3010 Old Ranch Parkway, suite 470 Seal Beach, CA 90740 Tel: 562-284-5005

Project:

2919 S King Rd SITE DEVELOPMENT FILE NO: PD22-009

San Jose, CA

Consultants:

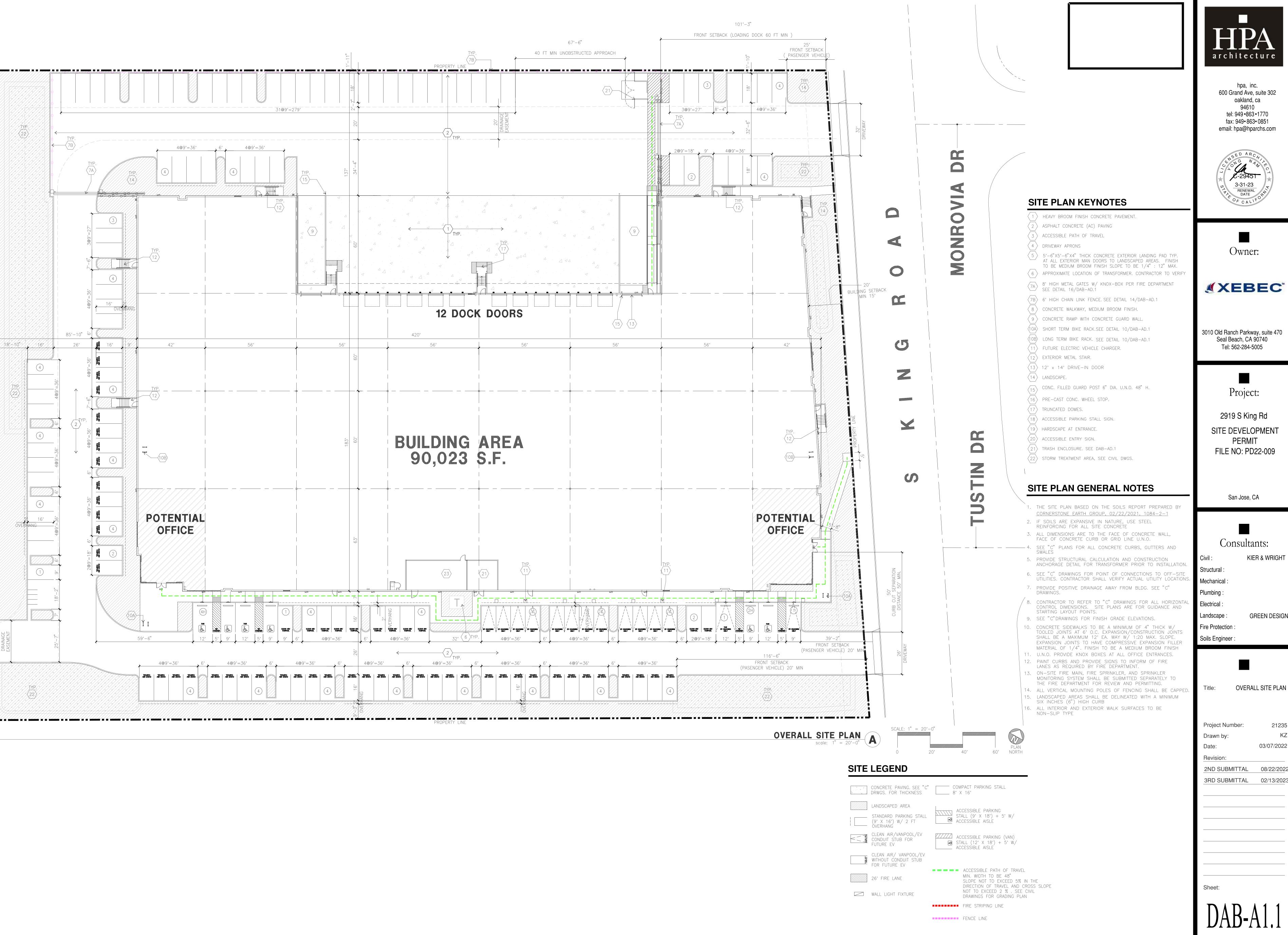
KIER & WRIGHT Structural: Mechanical: Plumbing: Electrical:

GREEN DESIGN Landscape: Fire Protection: Soils Engineer:

TITLE SHEET

Project Number: 21235 Drawn by:

03/07/2022 Revision: 2ND SUBMITTAL 08/22/2022 3RD SUBMITTAL 02/13/2023





600 Grand Ave, suite 302 oakland, ca tel: 949 •863 •1770 fax: 949 • 863 • 0851 email: hpa@hparchs.com



Owner:

Project:

2919 S King Rd SITE DEVELOPMENT **PERMIT** FILE NO: PD22-009

San Jose, CA

Consultants:

KIER & WRIGHT

GREEN DESIGN

OVERALL SITE PLAN

Project Number: 21235 03/07/2022

2ND SUBMITTAL 08/22/2022

3RD SUBMITTAL 02/13/2023



Appendices B – San José VMT Evaluation Tool Summary Report

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

#### PROJECT:

 Name:
 2919 S King Rd
 Tool Version:
 2/29/2019

 Location:
 2919 S Kings Rd
 Date:
 10/3/2022

Parcel: 67012015 Parcel Type: Suburb with Multifamily Housing

Proposed Parking Spaces Vehicles: 159 Bicycles: 16

#### 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, $\leq 80\%$ MFI)	0 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	92.12 KSF		

#### **VMT REDUCTION STRATEGIES**

#### **Tier 1 - Project Characteristics**

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	6
With Project Density (DU/Residential Acres in half-mile buffer)	6
Increase Development Diversity	
Existing Activity Mix Index	0.41
With Project Activity Mix Index	0.44
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)	17
With Project Density (Jobs/Commercial Acres in half-mile buffer)	18

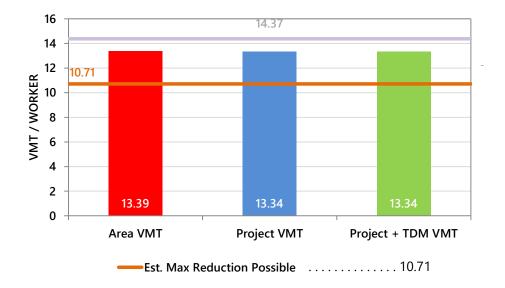
#### **Tier 2 - Multimodal Infrastructure**

#### Tier 3 - Parking

#### **Tier 4 - TDM Programs**

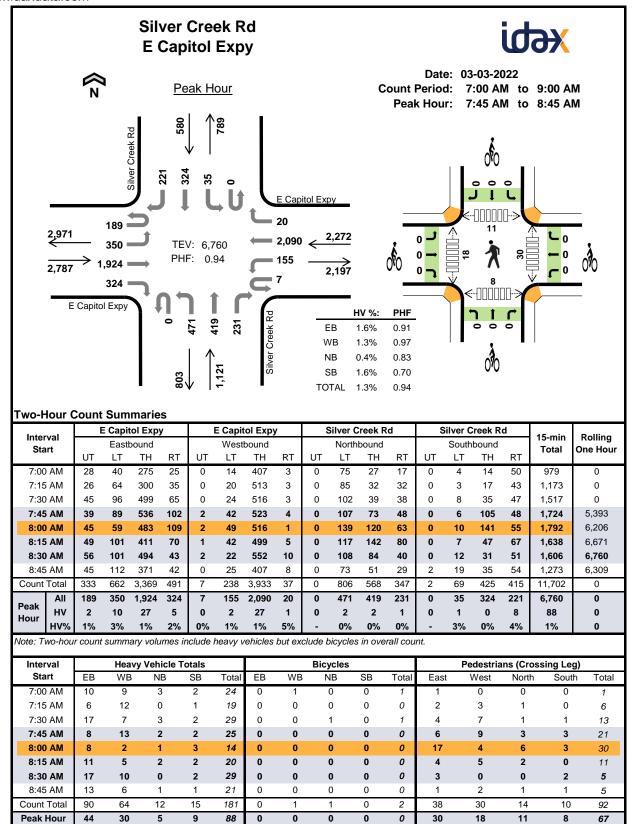
#### **EMPLOYMENT ONLY**

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





Appendices C – Intersection, Roadway, and Freeway Traffic Counts



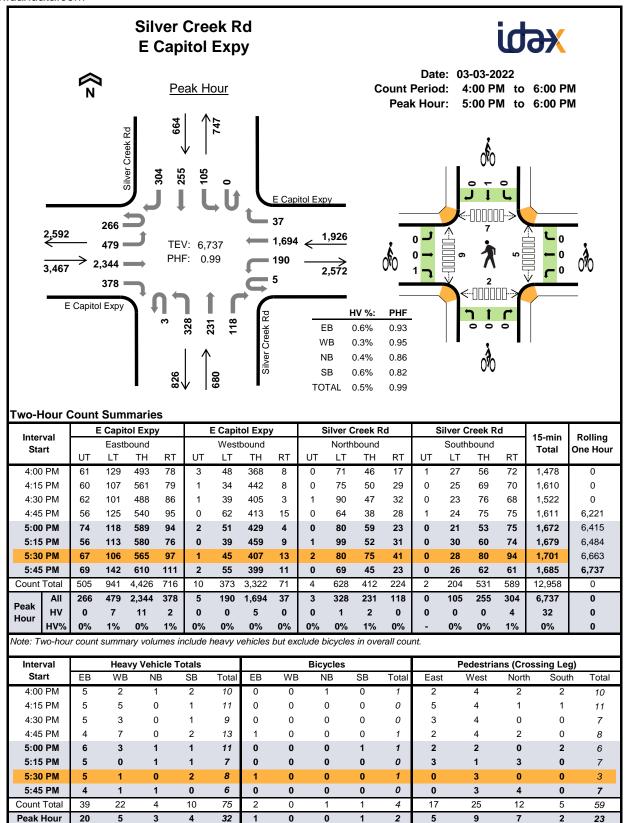
lata a sal	E Capitol Expy Eastbound			E Capitol Expy Westbound				S	Silver Creek Rd				Silver Creek Rd				D - 111	
Interval Start								Northbound				Southbound				15-min Total	Rolling One Hour	
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riour
7:00 AM	0	2	6	2	0	0	9	0	0	2	0	1	0	1	0	1	24	0
7:15 AM	0	1	5	0	0	0	12	0	0	0	0	0	0	0	0	1	19	0
7:30 AM	0	5	10	2	0	0	7	0	0	2	1	0	0	0	1	1	29	0
7:45 AM	0	2	6	0	0	1	12	0	0	0	2	0	0	0	0	2	25	97
8:00 AM	0	0	5	3	0	0	2	0	0	1	0	0	0	1	0	2	14	87
8:15 AM	0	3	7	1	0	1	4	0	0	1	0	1	0	0	0	2	20	88
8:30 AM	2	5	9	1	0	0	9	1	0	0	0	0	0	0	0	2	29	88
8:45 AM	1	6	6	0	0	1	5	0	0	1	0	0	0	0	0	1	21	84
Count Total	3	24	54	9	0	3	60	1	0	7	3	2	0	2	1	12	181	0
Peak Hour	2	10	27	5	0	2	27	1	0	2	2	1	0	1	0	8	88	0

#### Two-Hour Count Summaries - Bikes

Interval	ΕC	Capitol E	хру	E Capitol Expy			Silv	er Cree	k Rd	Silv	er Creel	15-min	Rolling	
Start	Eastbound			Westbound			Northbound			S	outhbou	Total	One Hour	
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	- Ottai	One near
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	1	0	0	0	0	2	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

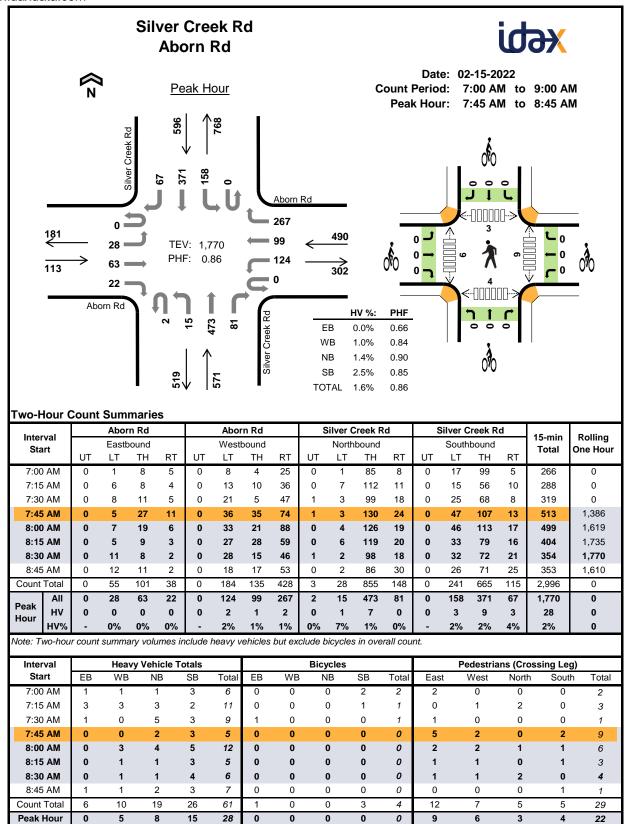
Project Manager: (415) 310-6469



	E	Capit	ol Exp	y	E	Capit	ol Exp	у	8	Silver C	reek R	d	9	Silver C	reek R	d	45!	D-111
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	0	2	3	0	0	0	2	0	0	1	0	0	0	0	0	2	10	0
4:15 PM	1	1	3	0	0	0	5	0	0	0	0	0	0	0	0	1	11	0
4:30 PM	0	3	1	1	0	0	3	0	0	0	0	0	0	0	0	1	9	0
4:45 PM	1	1	2	0	0	1	5	1	0	0	0	0	0	0	0	2	13	43
5:00 PM	0	1	4	1	0	0	3	0	0	1	0	0	0	0	0	1	11	44
5:15 PM	0	2	3	0	0	0	0	0	0	0	1	0	0	0	0	1	7	40
5:30 PM	0	2	2	1	0	0	1	0	0	0	0	0	0	0	0	2	8	39
5:45 PM	0	2	2	0	0	0	1	0	0	0	1	0	0	0	0	0	6	32
Count Total	2	14	20	3	0	1	20	1	0	2	2	0	0	0	0	10	75	0
Peak Hour	0	7	11	2	0	0	5	0	0	1	2	0	0	0	0	4	32	0

Intonial	ΕC	Capitol E	хру	ΕC	Capitol E	хру	Silv	er Creel	k Rd	Silv	er Creel	k Rd	45	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	rotai	One riou
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	1	1	0	0	0	0	1	0	0	1	0	4	0
Peak Hour	0	0	1	0	0	0	0	0	0	0	1	0	2	0

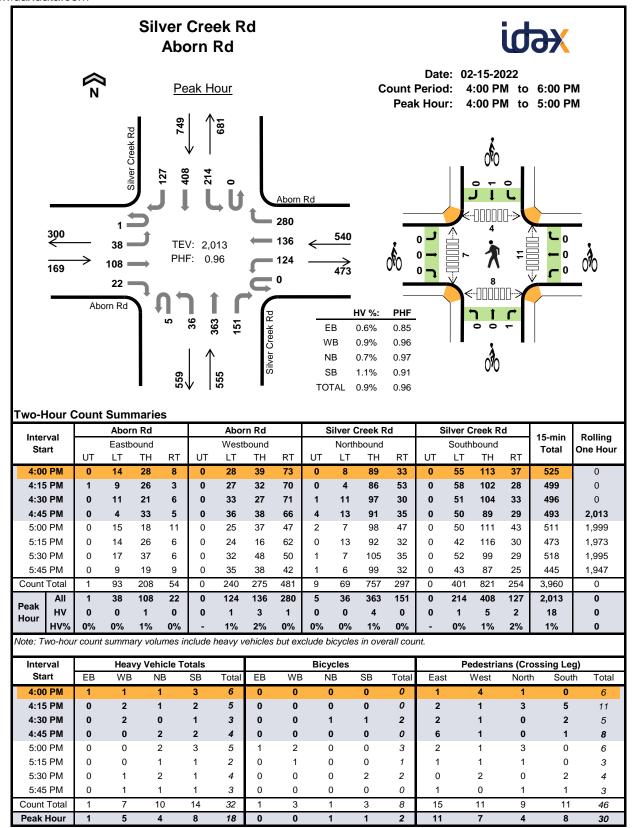
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval		Abor	n Rd			Aboı	rn Rd		8	Silver C	reek R	d		Silver C	reek R	d	45	Dalling
Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	1	0	0	0	0	1	0	0	1	0	0	0	2	1	6	0
7:15 AM	0	0	3	0	0	0	2	1	0	0	3	0	0	1	1	0	11	0
7:30 AM	0	1	0	0	0	0	0	0	0	1	4	0	0	0	3	0	9	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	1	5	31
8:00 AM	0	0	0	0	0	1	0	2	0	0	4	0	0	2	3	0	12	37
8:15 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0	5	31
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	2	6	28
8:45 AM	0	1	0	0	0	0	0	1	0	0	1	1	0	0	2	1	7	30
Count Total	0	2	4	0	0	2	3	5	0	2	16	1	0	4	17	5	61	0
Peak Hour	0	0	0	0	0	2	1	2	0	1	7	0	0	3	9	3	28	0

Interval		Aborn Ro	d		Aborn R	d	Silv	er Cree	k Rd	Silv	er Creel	k Rd	45	Dalling
Interval Start	E	Eastboun	d	٧	Vestbour	nd	N	lorthbou	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Jul. 1	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.10 1.00.
7:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	0	0	0	0	0	0	0	1	2	0	4	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

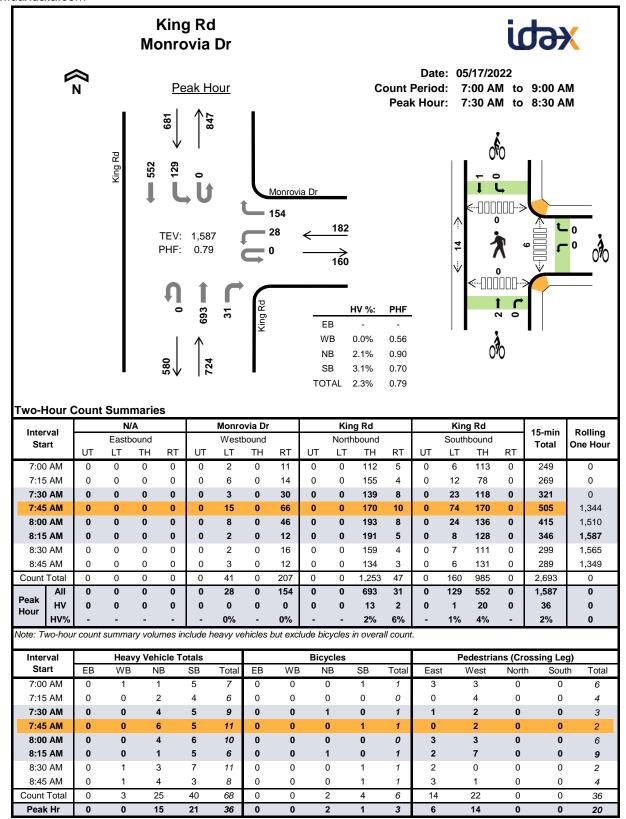
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval		Abor	n Rd			Aboı	n Rd		9	Silver C	reek R	d	9	ilver C	reek R	d	15 min	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	0	0	1	0	0	1	0	0	0	0	1	0	0	1	2	0	6	0
4:15 PM	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	1	5	0
4:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	4	18
5:00 PM	0	0	0	0	0	0	0	0	1	0	1	0	0	2	1	0	5	17
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	14
5:30 PM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	4	15
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	3	14
Count Total	0	0	1	0	0	1	4	2	1	0	8	1	0	3	9	2	32	0
Peak Hour	0	0	1	0	0	1	3	1	0	0	4	0	0	1	5	2	18	0

Interval		Aborn Ro	d		Aborn R	d	Silv	er Creek	k Rd	Silv	er Creek	( Rd	15-min	Rolling
Start	E	Eastboun	d	٧	Vestbour	nd	N	orthbour	nd	S	outhbour	nd	Total	One Hour
O.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • •	0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	1	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	0	2	0	0	0	0	0	0	3	5
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	0	1	0	0	0	3	0	0	1	0	3	0	8	0
Peak Hour	0	0	0	0	0	0	0	0	1	0	1	0	2	0

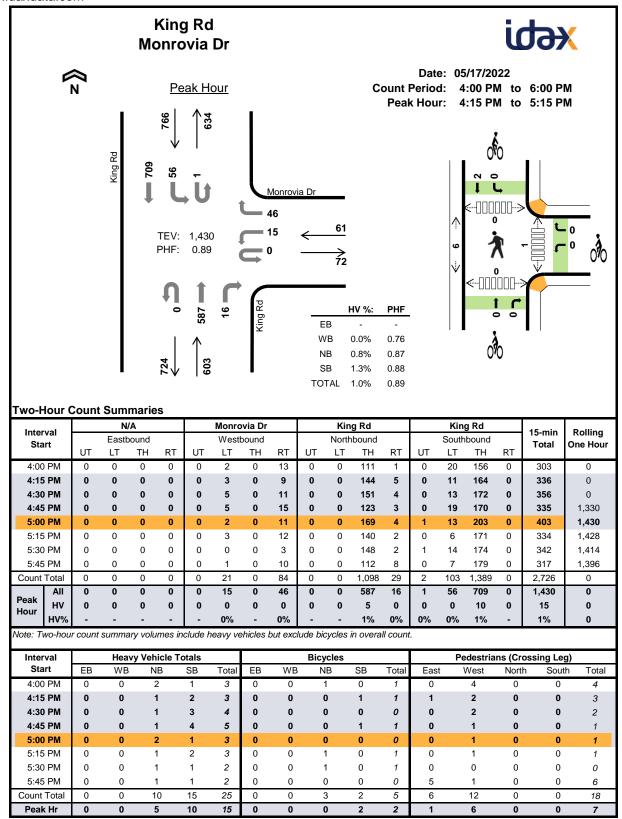
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour (	Count	Sum	marie	s - He	eavy \	Vehic	les											
Interval		N	/A			Monro	ovia Dr			Kin	g Rd			Kin	g Rd		45	Dalling
Interval Start		Easth	oound			West	bound	•		North	bound	•		South	bound		15-min Total	Rolling One Hour
Giart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	· Stai	Ono rioui
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	5	0	7	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	6	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	4	0	9	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	5	1	0	0	5	0	11	33
8:00 AM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	6	0	10	36
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	36
8:30 AM	0	0	0	0	0	0	0	1	0	0	3	0	0	1	6	0	11	38
8:45 AM	0	0	0	0	0	1	0	0	0	0	3	1	0	0	3	0	8	35
Count Total	0	0	0	0	0	1	0	2	0	0	22	3	0	4	36	0	68	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	13	2	0	1	20	0	36	0

Internal		N/A		M	lonrovia	Dr		King Rd	l		King Rd		45	D. III
Interval Start		Eastboun	d	\	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	0	0	0	0	0	0	2	0	0	4	0	6	0
Peak Hour	0	0	0	0	0	0	0	2	0	0	1	0	3	0

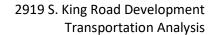
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour (	Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		N	/A			Monro	ovia Dr			Kin	g Rd			Kin	g Rd		15-min	Rolling
Start		Easth	oound			West	bound			North	bound			South	bound		Total	One Hour
<b>5.</b>	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		0.10.11041
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5	15
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	15
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	15
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	13
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10
Count Total	0	0	0	0	0	0	0	0	0	0	10	0	0	0	15	0	25	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	5	0	0	0	10	0	15	0

Internal		N/A		M	lonrovia	Dr		King Rd			King Rd		45	D. III.
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	rotui	One neur
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	2
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	3	0	0	2	0	5	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	2	0	2	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.





Appendices D – San José Approved Trip Inventory

Intersection of : Aborn Rd & Silver Creek Rd / S King Rd

Traffix Node Number: 3216												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDPZONEH Residential EVERGREEN EDP ZONE H	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEQ Residential EVERGREEN EDP ZONE Q	0	2	0	0	1	0	0	0	0	0	0	0
EDPZONES Residential EVERGREEN EDP ZONE S	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	0	0	0	4	0	0	0	0	0	0	0	2
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL	0	12	0	39	102	0	0	0	0	0	0	10

TOTAL: 0 14 0 43 103 0 0 0 0 0 12

	LEFT	THRU	RIGHT
NORTH	43	103	0
EAST	0	0	12
SOUTH	0	14	0
WEST	0	0	0

											01/25	/2022
Intersection of : Aborn Rd & Silver	Creek Rd / S K	ing Rd										
Traffix Node Number: 3216												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDPZONEH Residential EVERGREEN EDP ZONE H	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEQ Residential EVERGREEN EDP ZONE Q	0	1	0	0	2	0	0	0	0	0	0	0
EDPZONES Residential EVERGREEN EDP ZONE S	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	1	0	0	0	0	0	0	0	0	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	0	0	0	8	0	0	0	0	0	0	0	8
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL	0	102	0	10	12	0	0	0	0	0	0	39

TOTAL: 0 103 1 18 14 0 0 0 0 0 0 47

	LEFT	THRU	RIGHT
NORTH	18	14	0
EAST	0	0	47
SOUTH	0	103	1
WEST	0	0	0

Intersection of : E Capitol Ex & Silver Creek Rd

Permit No./Proposed Land   M09   M08   M07   M03   M02   M01   M12   M11   M10   M06   M05   M04   M05   M	Traffix Node Number : 5723												
Residential EVERGREEN													
Residential EVERGREEN EDP ZONE H  EDPZONEJ  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential EVERGREEN	0	0	0	0	1	0	0	0	0	0	0	0
Residential EVERGREEN EDP ZONE J  EDPZONEM	Residential EVERGREEN	0	0	0	0	0	0	0	0	0	0	0	0
Residential EVERGREEN EDP ZONE M  EDPZONEM  EDPZONEM  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential EVERGREEN	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential EVERGREEN EDP ZONE M	0	0	0	0	1	0	0	0	0	0	0	0
Residential         EVERGREEN         EDP ZONE P         EDPZONEQ       0 0 0 0 0 0 1 0 0 2 0         Residential         EVERGREEN	EDPZONEN Residential EVERGREEN	0	0	0	0	0	0	0	0	0	0	0	0
Residential EVERGREEN	Residential EVERGREEN EDP ZONE P	0	10	0	0	18	0	0	0	0	0	0	0
	EDPZONEQ Residential EVERGREEN	0	0	0	0	0	0	0	1	0	0	2	0

Intersection of : E Capitol Ex & Si	lver Creek Rd											
Traffix Node Number : 5723												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDPZONES Residential EVERGREEN EDP ZONE S	0	0	0	0	0	0	0	0	0	1	0	0
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	0	0	0	0	0	0	5	0	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	1	3	0	0	1	0	0	2	0	0	5	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	0	0	4	0	0	0	0	22	0	1	11	0
NSJ LEGACY	1	2	0	0	0	0	1	13	18	1	1	0
NORTH SAN JOSE												
PDC13-009 (IND) (3-18407) LEGACY	8	0	0	13	26	0	0	4	11	0	9	7
COMMUNICATION HILL												
PDC13-009 (RES) (3-18407) LEGACY	3	0	0	5	11	0	0	1	4	0	3	2
COMMUNICATIONS HILL												

AM PROJECT TRIPS 01/25/2022

Intersection	of	:	$\mathbf{E}$	Capitol	Eχ	&	Silver	Creek	Rd

Traffix Node Number : 5723												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC13-009 (RET) (3-18407) LEGACY	0	0	0	1	0	0	0	0	0	0	0	0
COMMUNICATIONS HILL												
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL	0	29	0	0	3	0	12	89	0	0	12	0
PDC99-11-086 (3-13395) Retail/Commercial MURILLO AV (N/S), OPP GROESBECK HILL DR MURILLO CHURCH AND SCHOOL	-2	0	5	0	0	0	0	18	0	3	7	0

	LEFT	THRU	RIGHT
NORTH	19	61	0
EAST	6	50	9
SOUTH	11	44	9
WEST	13	155	33

TOTAL:

Intersection of : E Capitol Ex & Silver Creek Rd

Traffix Node Number : 5723												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDPZONED Residential EVERGREEN EDP ZONE D	0	1	0	0	0	0	0	0	0	0	0	0
EDPZONEH Residential EVERGREEN EDP ZONE H	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEJ Residential EVERGREEN EDP ZONE J	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEM Residential EVERGREEN EDP ZONE M	0	1	0	0	0	0	0	0	0	0	0	0
EDPZONEN Residential EVERGREEN EDP ZONE N	0	0	0	0	0	0	0	0	0	0	0	0
EDPZONEP Residential EVERGREEN EDP ZONE P	0	18	0	0	10	0	0	0	0	0	0	0
EDPZONEQ Residential EVERGREEN EDP ZONE Q	0	0	0	0	0	0	0	2	0	0	1	0

01/25/2022

Traffix Node Number: 5723												
TIATITA NOGE NUMBER : 3/23												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBI
EDPZONES Residential EVERGREEN EDP ZONE S	0	0	1	0	0	0	0	0	0	0	0	0
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	0	0	0	0	0	0	1	0	0	4	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	2	0	0	5	0	0	7	1	0	4	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	0	0	13	0	0	0	0	64	0	13	64	0
NSJ LEGACY	0	5	0	1	5	0	0	1	2	14	6	1
NORTH SAN JOSE												
PDC13-009 (IND) (3-18407) LEGACY	2	3	0	6	9	0	0	3	0	6	1	0
COMMUNICATION HILL												
PDC13-009 (RES) (3-18407) LEGACY	0	0	0	2	3	0	0	0	0	2	0	0
COMMUNICATIONS HILL												

Intersection of	:	Ε	Capitol	Eχ	&	Silver	Creek	Rd
-----------------	---	---	---------	----	---	--------	-------	----

Traffix Node Number : 5723													
Permit No./Proposed Land Use/Description/Location		M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC13-009 (RET) (3-18407) LEGACY		0	1	0	0	1	0	0	0	0	0	0	0
COMMUNICATIONS HILL													
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL		0	3	0	0	29	12	0	12	0	0	89	0
PDC99-11-086 (3-13395) Retail/Commercial MURILLO AV (N/S), OPP GROESBECK HILL DR MURILLO CHURCH AND SCHOOL		0	0	1	0	0	0	0	2	0	0	10	0
T	OTAL:	2	34	15	9	62	12	0	92	3	35	179	1

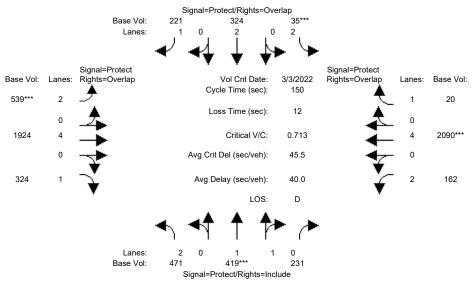
	LEFT	THRU	RIGHT
NORTH	9	62	12
EAST	35	179	1
SOUTH	2	34	15
WEST	0	92	3



Appendices E – TRAFFIX Intersection Operations Analysis

Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) EX AM

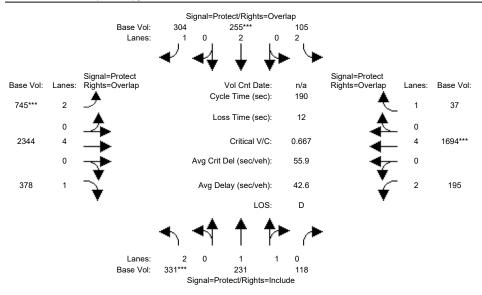
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name: Approach:	No	Si. rth Bo	lver C und	reek l Sou	Rd. uth Bo	und	E	Cap ast Bo	itol E	xpressway West Bound			
Movement:	, ш	– T	– ĸ	. т.	- T	- K	. т.	- T	- R	. т.	- T.	- K	
Min. Green: Y+R:	7 4.0	10 4.0	10	7 4.0	10 4.0	10	7 4.0	10 4.0	10 4.0	7 4.0	10 4.0	10 4.0	
Volume Module													
		419		35		221	539	1924	324	162	2090	20	
Growth Adj:					1.00			1.00	1.00			1.00	
Initial Bse:				35			539		324			20	
User Adj:					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	
PHF Volume:				35			539	1924	324	162	2090	20	
Reduct Vol:			0			0	0		0	0	0	0	
Reduced Vol:	471	419	231	35	324	221	539	1924	324	162	2090	20	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	471	419	231	35	324	221	539	1924	324	162	2090	20	
Saturation F	low M	odule:											
Sat/Lane:				1900	1900				1900		1900		
Adjustment:					0.95				0.85				
Lanes:					2.00				1.00			1.00	
Final Sat.:					3610				1615		6916		
Capacity Ana	-			0 01	0 00	0 1 4	0 1 5	0 00	0 00	0 0 5	0 00	0 01	
Vol/Sat:			0.19	****		0.14	0.15 ****		0.20	0.05	0.30 ****	0.01	
Crit Moves:						0 22			0 71	0 00		0.46	
<pre>Green/Cycle: Volume/Cap:</pre>			0.26		0.12				0.71		0.41	0.46	
Delay/Veh:				0.21		0.42 39.6	0.74		0.28		38.7	22.6	
User DelAdj:				1.00		1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:									8.0		38.7	22.6	
LOS by Move:									A			22.0 C	
HCM2kAvgQ:	12	16	16			8		16	5	4	23		
Note: Queue									5	-	20	0	
	> T T-				50	, 1-21		-					

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) EX PM

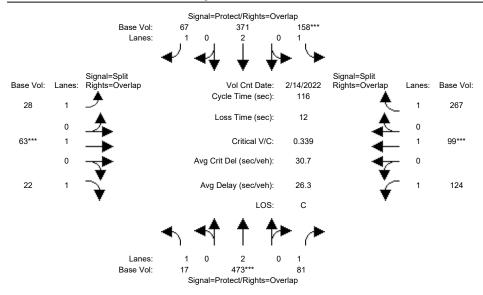
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name: Approach:	No	Si rth Bo	lver C und	reek E Sou	Rd. uth Bo	und	Ea	Cap ast Bo	itol E und	Expressway West Bound			
Movement:	L ·	– T	– R	L -	- T	<ul><li>R</li></ul>	L -	- T	<ul><li>R</li></ul>	L -	- T	<ul><li>R</li></ul>	
Min. Green:													
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			110	105	0.5.5	204	745	0044	270	105	1.604	2.7	
Base Vol:													
Growth Adj:									1.00				
Initial Bse:							745		378			37	
User Adj:						1.00			1.00		1.00	1.00	
PHF Adj:						1.00	1.00		1.00		1.00	1.00	
PHF Volume:									378			37	
Reduct Vol:													
Reduced Vol:													
PCE Adj:									1.00				
MLF Adj:									1.00				
FinalVolume:													
Saturation F	low M	odule:											
Sat/Lane:									1900				
Adjustment:							0.92		0.85				
Lanes:													
Final Sat.:													
Capacity Ana	lysis	Modul	e:										
Vol/Sat:												0.02	
Crit Moves:	****				****		****				****		
Green/Cycle:	0.14	0.19	0.19	0.06	0.11	0.42	0.32	0.59	0.73	0.10	0.37	0.42	
Volume/Cap:	0.67	0.53	0.53	0.53	0.67	0.44	0.67	0.58	0.32	0.58	0.67	0.05	
Delay/Veh:	76.7	66.4	66.4	85.4	81.9	37.2	54.6	23.2	8.7	80.2	48.4	30.7	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:							54.6	23.2	8.7	80.2	48.4	30.7	
LOS by Move:							D	С	А	F	D	С	
HCM2kAvgQ:	10	9	9	3	7	11	18	21	7	6	21	1	
Note: Queue													

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) EX AM

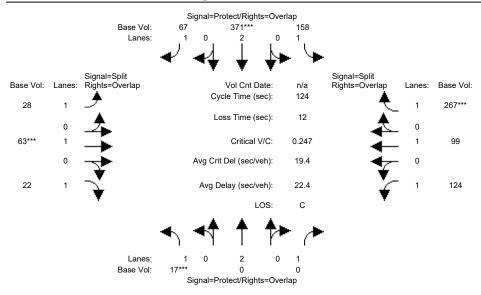
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Street Name:	: Silver Creek Road - S. King Rd.							Aborn Rd.						
Approach:	No	rth Bo	und	Soi	uth Bo	und	Εā	ast Bo	und	West Bound				
Movement:														
Min. Green:		10			10			10			 10			
Y+R:		4.0			4.0			4.0			4.0			
Volume Module										1		'		
Base Vol:	17		81	158	371	67	28	63	22	124	99	267		
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:	17	473	81	158	371	67	28	63	22	124	99	267		
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:		473	81	158	371	67	28	63	22	124	99	267		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:		473	81	158	371	67	28	63	22	124	99	267		
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		
FinalVolume:	17	473	81	158	371	67	28	63	22	124	99	267		
Saturation F	low M	odule:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85		
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1900	1615		
Capacity Ana	lysis	Modul	e:											
Vol/Sat:	0.01	0.13	0.05	0.09	0.10	0.04	0.02	0.03	0.01	0.07	0.05	0.17		
Crit Moves:		****		****				****			****			
Green/Cycle:	0.24	0.39	0.62	0.26	0.41	0.50	0.10	0.10	0.34		0.23	0.49		
Volume/Cap:	0.04	0.34	0.08	0.34	0.25	0.08	0.16	0.34	0.04	0.30	0.23	0.34		
Delay/Veh:			9.0	35.4	22.9	14.9	48.4	49.9	25.9		36.6	18.5		
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:			9.0	35.4	22.9	14.9	48.4	49.9	25.9	37.4	36.6	18.5		
LOS by Move:			A	D	С	В	D	D	С	D		В		
J ~	0		1	5	4	1	1		1	4	3	6		
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•						

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) EX PM

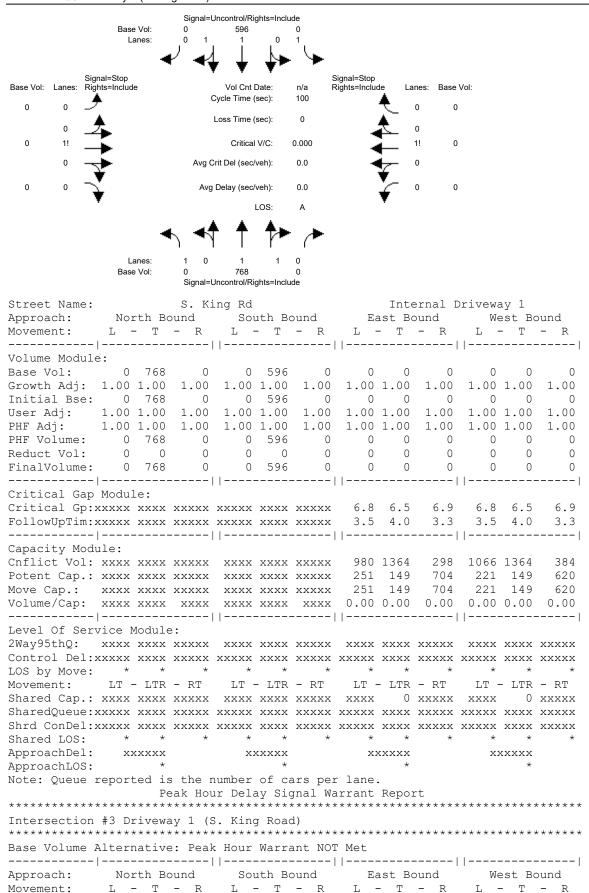
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Street Name:	Silv	er Cre	ek Roa	.d - S	. King	Rd.	Aborn Rd. East Bound West Bound					
Movement:	L	- T	- R	L ·	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green:												
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 Modul												
Base Vol:												
Growth Adj:									1.00			1.00
Initial Bse:							28		22			267
User Adj:									1.00		1.00	1.00
PHF Adj:									1.00		1.00	1.00
PHF Volume:							28			124		267
Reduct Vol:												
Reduced Vol:											99	267
PCE Adj:									1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F	low M	odule:										
Sat/Lane:							1900	1900	1900		1900	1900
Adjustment:							0.95	1.00	0.85	0.95	1.00	0.85
Lanes:				1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1900	1805	3610	1615	1805	1900	1615	1805	1900	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:							0.02	0.03	0.01	0.07	0.05	0.17
Crit Moves:					****			****				****
Green/Cycle:	0.04	0.00	0.00	0.45	0.42	0.55	0.13	0.13	0.17	0.31	0.31	0.77
Volume/Cap:	0.25	0.00	0.00	0.19	0.25	0.08	0.12	0.25	0.08	0.22	0.17	0.21
Delay/Veh:	59.8	0.0	0.0	20.4	23.7	13.1	47.4	48.6	43.2	31.4	30.8	4.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.8	0.0	0.0	20.4	23.7	13.1	47.4	48.6	43.2	31.4	30.8	4.1
LOS by Move:	E	A	A	С	С	В	D	D	D	С	С	A
HCM2kAvgQ:	1	0	0	3	5	1	1	2	1	3	3	3
Note: Queue												

#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) EX AM

## Intersection #3: Driveway 1 (S. King Road)



Page 3-6

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 1! 0
 0 0 1! 0 0 Initial Vol: 0 768 0 0 596 0 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

#### SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #3 Driveway 1 (S. King Road)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0

Initial Vol: 0 768 0 0 596 0 0 0 0 0 0 0 -----|

Major Street Volume: 1364
Minor Approach Volume: 0 Minor Approach Volume Threshold: 178

\_\_\_\_\_\_

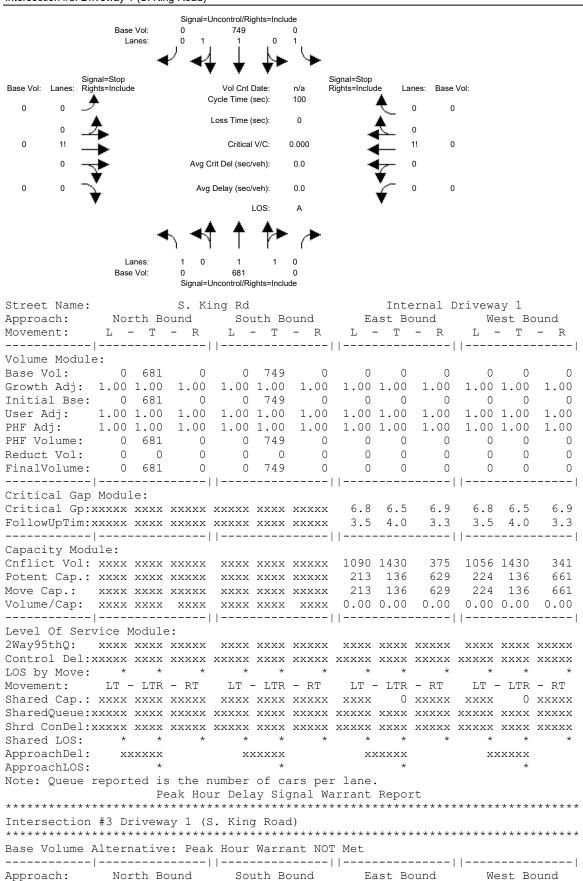
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This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) EX PM

## Intersection #3: Driveway 1 (S. King Road)



L - T - R

L-T-R L-T-R L-T-R

Page 3-8

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 1! 0
 0 0 1! 0 0 Initial Vol: 0 681 0 0 749 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

#### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #3 Driveway 1 (S. King Road)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0

Initial Vol: 0 681 0 0 749 0 0 0 0 0 0 0 -----|

Major Street Volume: 1430 Minor Approach Volume: 0 Minor Approach Volume Threshold: 162

\_\_\_\_\_\_

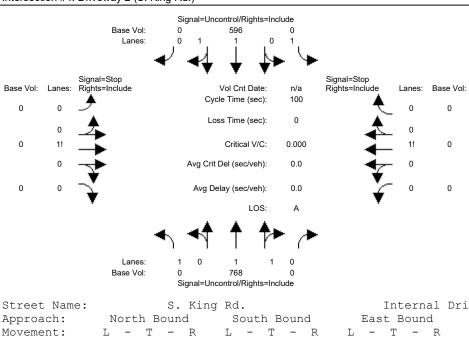
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## Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) EX AM

# Intersection #4: Driveway 2 (S. King Rd.)



Observat Name			O TEL	D -1	9.110		Internal Driveway 2						
Street Name: Approach:		r+h D	ound S. KII	ng Rd.	1+h D	aun d	₽.		ernai i ound			ound	
Movement:	T	_ т _ т	– R	T		- R			- R		- Т		
Volume Module:													
Base Vol:		768	0	0	596	0	0	0	0	0	0	0	
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:		768	0	0	596	0	0	0	0	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	768	0	0	596	0	0	0	0	0	0	0	
Reduct Vol:			0	0	0	0	0	0	0	0	0	0	
FinalVolume:					596	0	0	0	0	0	0	0	
Critical Gap													
Critical Gp:													
FollowUpTim:											4.0		
Company to Manual													
Capacity Modu							000	1261	200	1000	1261	384	
Cnflict Vol:								1364 149			1364 149	384 620	
Potent Cap.:												620	
Move Cap.: Volume/Cap:									0.00		0.00		
Level Of Serv				1 1			1 1			1 1		ļ	
2Way95thQ:				xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	XXXX	xxxx	XXXXX	
Control Del:											xxxx	XXXXX	
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*	
Movement:				LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	
Shared Cap.:	xxxx	XXXX	XXXXX	XXXX	xxxx	XXXXX	XXXX	0	XXXXX	XXXX	0	XXXXX	
SharedQueue:	xxxxx	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	
Shrd ConDel:	XXXXX											XXXXX	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	
ApproachDel:				X	XXXXX		X	XXXXX		X	XXXXX		
ApproachLOS:		*			*		_	*			*		
Note: Queue	repor												
******	* * * * *						arrant *****			*****	****	*****	
Intersection													
******	π	* * * * * *	*****	****	* * * * * * *	, * * * * * * * *	*****	****	*****	*****	****	*****	
Base Volume A													
	Approach: North Bound South Bound East Bound West Bound												
Movement:	L ·	- T	- R	L ·	- T	- R	L -	- T	- R	L -	- T	- R	

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 1! 0
 0 0 1! 0 0 Initial Vol: 0 768 0 0 596 0 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0

Initial Vol: 0 768 0 0 596 0 0 0 0 0 0 0 -----|

Major Street Volume: 1364
Minor Approach Volume: 0 Minor Approach Volume Threshold: 178

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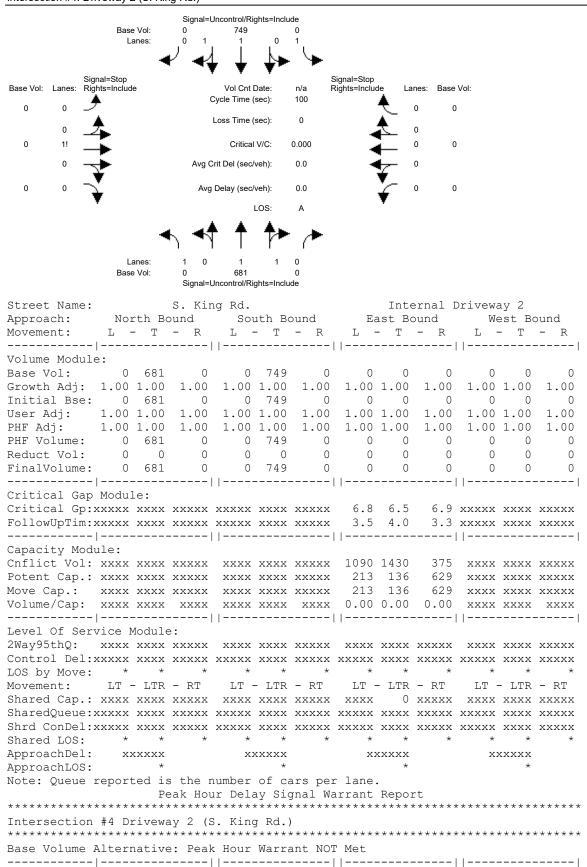
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#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) EX PM

## Intersection #4: Driveway 2 (S. King Rd.)



Approach:

North Bound

L - T - R

South Bound

East Bound West Bound

L-T-R L-T-R L-T-R

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 0
 0 0 0 0
 0 0 0 0 0 Initial Vol: 0 681 0 0 749 0 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 1 0 0 0 1! 0 0 0 0 0

Initial Vol: 0 681 0 0 749 0 0 0 0 0 0 0 -----|

Major Street Volume: 1430
Minor Approach Volume: 0 Minor Approach Volume Threshold: 162

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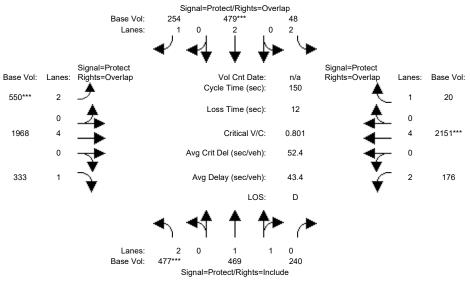
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Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) BG AM

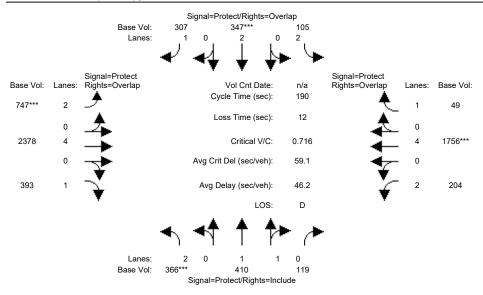
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name:		Sil	lver C	reek I	Rd.	Capitol Expressway East Bound West Bound						
Movement:											- T	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	∋:											
Base Vol:	477	469	240	48	479	254	550	1968	333	176	2151	20
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:			240	48	479	254	550	1968	333	176	2151	20
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
PHF Volume:		469	240	48	479	254	550		333		2151	20
Reduct Vol:		0	0	0		0	0		0	0		0
Reduced Vol:		-		48			550		333		2151	20
PCE Adj:			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
FinalVolume:			240			254			333		2151	20
Saturation Fl			'	ı		ı	I		'	I		1
Sat/Lane:			1 0 0 0	1 0 0 0	1 0 0 0	1 0 0 0	1 0 0 0	1900	1900	1 9 0 0	1900	1900
Adjustment:				0.92		0.85		0.91	0.85		0.91	0.85
				2.00			2.00		1.00			1.00
Lanes: Final Sat.:				3502		1615		6916	1615		6916	1615
rinai Sat.:												
	•											
Capacity Anal				0 01	0 10	0 16	0 16	0 00	0 01	0 0 5	0 01	0 01
Vol/Sat:				0.01	0.13				0.21		0.31	0.01
Crit Moves:												
Green/Cycle:				0.06		0.36		0.50	0.67		0.39	0.45
Volume/Cap:				0.22		0.43		0.57	0.31		0.80	0.03
Delay/Veh:			53.4	67.5		36.8		26.8	10.7		42.5	23.0
User DelAdj:				1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:					67.8		64.2		10.7		42.5	23.0
LOS by Move:	E	D		E			E		В	E		С
HCM2kAvgQ:			17	1	12	9	14		6	5	25	0
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane	•				

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) BG PM

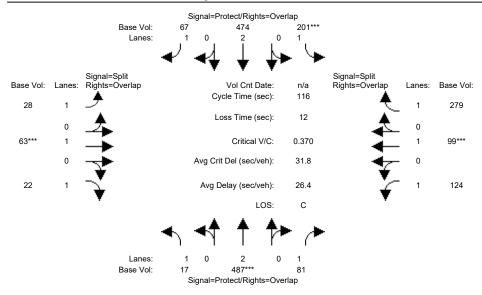
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name:		Silver	Creek 1	Rd.	,	Capitol Expressway East Bound West Bound						
Approach:	North	Bound	So	uth Bo	und	Εā	ast Bo	und	₩€	est Bo	und	
Movement:												
Min. Green:												
Y+R:												
Volume Module			1 1		1	1			1		ı	
Base Vol:			105	347	307	747	2378	393	204	1756	49	
Growth Adj:								1.00				
Initial Bse:						747		393			49	
User Adj:					1.00			1.00		1.00	1.00	
PHF Adj:					1.00		1.00	1.00		1.00	1.00	
PHF Volume:								393			49	
Reduct Vol:			0	0							0	
Reduced Vol:												
PCE Adj:			1.00					1.00				
MLF Adj:								1.00				
FinalVolume:												
Saturation F									•			
Sat/Lane:	1900 19	00 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92 0.	92 0.92	0.92	0.95	0.85	0.92	0.91	0.85	0.92	0.91	0.85	
Lanes:	2.00 1.	55 0.45	2.00	2.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00	
Final Sat.:	3502 27	03 784	3502	3610	1615	3502	6916	1615	3502	6916	1615	
Capacity Ana	lysis Mo	dule:										
Vol/Sat:											0.03	
Crit Moves:	***			***		****				****		
Green/Cycle:	0.15 0.	23 0.23	0.05	0.13	0.43	0.30	0.56	0.70	0.09	0.35	0.40	
Volume/Cap:			0.65	0.72	0.44	0.72	0.62	0.35	0.62	0.72	0.08	
Delay/Veh:	78.1 64	.1 64.1	93.2			58.8	27.1	10.6	81.8	51.2	33.3	
User DelAdj:						1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:						58.8		10.6			33.3	
LOS by Move:	E	E E	F	E	D	E	С	В	F	D	С	
HCM2kAvgQ:	11	14 14	3	10	11	19	24	8	6	23	2	
Note: Queue	reported	is the	number	of ca	ırs per	lane						

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) BG AM

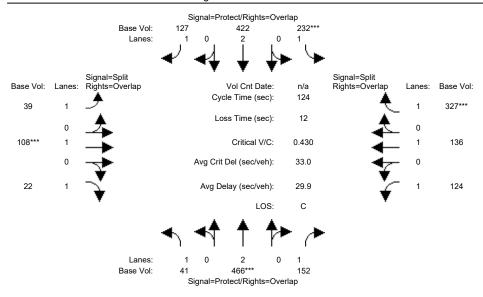
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Street Name:	Silv	er Cree	ek Roa	.d - S	. King	Rd.	Aborn Rd. East Bound West Bound					und
Movement:	L	– T ·	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R
 Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:												
Volume Modul												
Base Vol:			81	201	474	67	28	63	22	124	99	279
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:			81	201	474	67	28	63	22	124	99	279
User Adj:			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
PHF Volume:				201			28		22	124		279
Reduct Vol:									0			
Reduced Vol:												
PCE Adj:									1.00		1.00	1.00
MLF Adj:									1.00			1.00
FinalVolume:												
Saturation F.												
Sat/Lane:								1900	1900		1900	1900
Adjustment:								1.00	0.85		1.00	0.85
Lanes:									1.00			1.00
Final Sat.:									1615		1900	
Capacity Ana												
Vol/Sat:	-			0 11	0 13	0.04	0 02	0 03	0.01	0 07	0 05	0.17
Crit Moves:			0.05		0.13		0.02		0.01			0.17
Green/Cycle:					0.46			0.09	0.30			0.49
Volume/Cap:					0.29			0.37	0.05		0.28	0.35
Delay/Veh:					19.8			51.1	28.9		41.0	18.7
User DelAdi:								1.00	1.00		1.00	1.00
AdjDel/Veh:									28.9		41.0	18.7
LOS by Move:												В
HCM2kAvgQ:												
Note: Queue												

## Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) BG PM

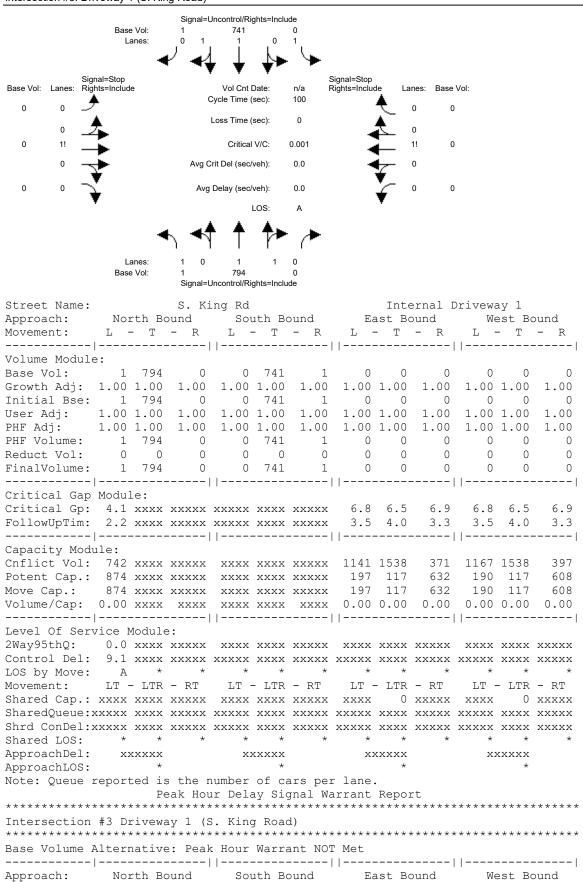
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Street Name: Approach:	Silv	er Cre	ek Roa	.d - S	. King	Rd.	E.	ast Bo	Aborn	Rd.	est Bo	und
Movement:	L	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green:												
Y+R:												
Volume Module												
Base Vol:	41	466	152	232	422	127	39	108	22	124	136	327
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:							39	108	22	124	136	327
User Adj:			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
PHF Volume:				232			39	108	22			327
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	466	152	232	422	127	39	108	22	124	136	327
PCE Adj:									1.00		1.00	1.00
MLF Adj:									1.00		1.00	1.00
FinalVolume:												
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	1900	1615	1805	1900	1615
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.02	0.13	0.09	0.13	0.12	0.08	0.02	0.06	0.01	0.07	0.07	0.20
Crit Moves:		****		***				****				****
Green/Cycle:	0.10	0.30	0.47	0.30	0.50	0.63	0.13	0.13	0.23	0.17	0.17	0.47
Volume/Cap:	0.23	0.43	0.20	0.43	0.23	0.12	0.16	0.43	0.06	0.40	0.42	0.43
Delay/Veh:	52.4	35.1	19.2	35.5	17.5	9.1	48.0	50.7	37.4	46.5	46.6	22.2
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:									37.4			22.2
LOS by Move:	D	D	В	D	В	A	D	D	D	D	D	С
HCM2kAvgQ:	1	7	3	7	5	2	1	4	1	4	5	8
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) BG AM

## Intersection #3: Driveway 1 (S. King Road)



L - T - R

L-T-R L-T-R L-T-R

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COMPARE Thu Mar 31 17:57:40 2022 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 1! 0
 0 0 1! 0 0 XXXXXX -----| \_\_\_\_\_\_

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #3 Driveway 1 (S. King Road)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0

Initial Vol: 1 794 0 0 741 1 0 0 0 0 0 0 -----||-----||------|

Major Street Volume: 1537
Minor Approach Volume: 0 Minor Approach Volume Threshold: 137

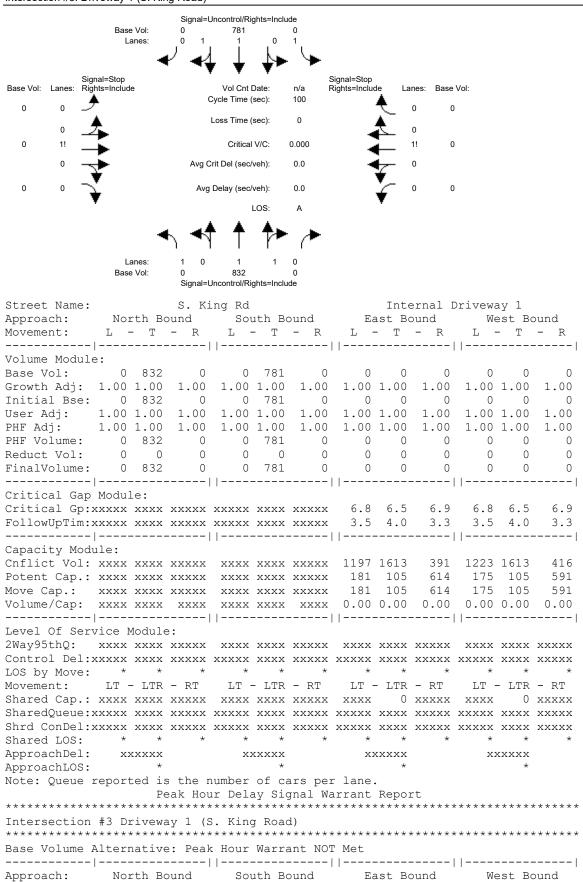
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#### SIGNAL WARRANT DISCLAIMER

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#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) BG PM

## Intersection #3: Driveway 1 (S. King Road)



L - T - R

L-T-R L-T-R L-T-R

Page 3-8

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 1! 0
 0 0 1! 0 0 Initial Vol: 0 832 0 0 781 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

#### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #3 Driveway 1 (S. King Road)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0

Initial Vol: 0 832 0 0 781 0 0 0 0 0 0 0 -----||-----||------|

Major Street Volume: 1613
Minor Approach Volume: 0 Minor Approach Volume Threshold: 120

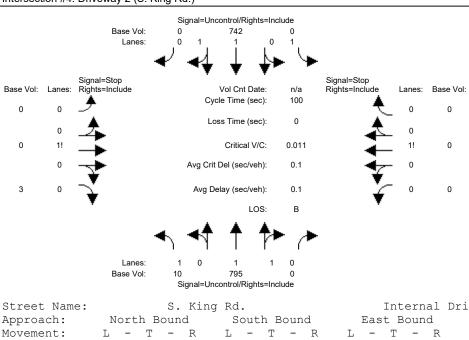
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#### SIGNAL WARRANT DISCLAIMER

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## Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) BG AM

# Intersection #4: Driveway 2 (S. King Rd.)



Street Name: Approach:	No	rth Bo	S. Kin	ng Rd.	uth Bo	nund	F.:	Inte	ernal I ound	Orivewa Wa	ay 2 est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module												
Base Vol:	10	795	0	0	742	0	0	0	3	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	10	795	0	0	742	0	0	0	3	0	0	0
User Adj:		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
PHF Volume:	10		0	0	742	0	0	0	3	0	0	0
Reduct Vol: FinalVolume:			0	0	-	0	0	0	0	0	0	0
rinalvolume:							-		_	-	-	-
Critical Gap				1 1			1 1			1 1		1
Critical Gp:	4.1	XXXX	XXXXX	XXXXX	xxxx	XXXXX	XXXXX	xxxx		7.5		
FollowUpTim:										3.5		
	'											
Capacity Modu									271	1100	1	200
Cnflict Vol: Potent Cap.:								XXXX		1186	1557	398 608
Move Cap.:												608
Volume/Cap:											0.00	
Level Of Serv	jice I	Module	<b></b> :									
2Way95thQ:	0.0	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	0.0	XXXX	XXXX	XXXXX
Control Del:							XXXXX			XXXXX		XXXXX
LOS by Move:							*		В	*	*	*
Movement: Shared Cap.:									- RT	XXXX	- LTR	- RT
SharedQueue:												
Shrd ConDel:												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		X	xxxxx			10.7		X	xxxxx	
ApproachLOS:		*			*			В			*	
Note: Queue	repor											
*****	****						arrant *****			*****	****	*****
Intersection	#4 D:	rivewa	ay 2 (	S. Kin	g Rd.	)						
******	****	****	*****	****	****	****	*****	* * * * *	*****	****	****	*****
Base Volume A												
7												
							E				est Bo	
Movement:	ь.	– T	- R	ь.	- T	- R	ь.	- T	- R	ь.	– T	- K

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 0 0 1 0 0 1! 0
 0 0 1! 0 0 \_\_\_\_\_\_| Approach[eastbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=3] FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1550] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches. \_\_\_\_\_\_

#### SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||------| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 0 1 0 0 0 0 1 0 0 1! 0 0

Initial Vol: 10 795 0 0 742 0 0 0 3 0 0 0 -----||-----||-----|

Major Street Volume: 1547 Minor Approach Volume: 3 Minor Approach Volume Threshold: 135

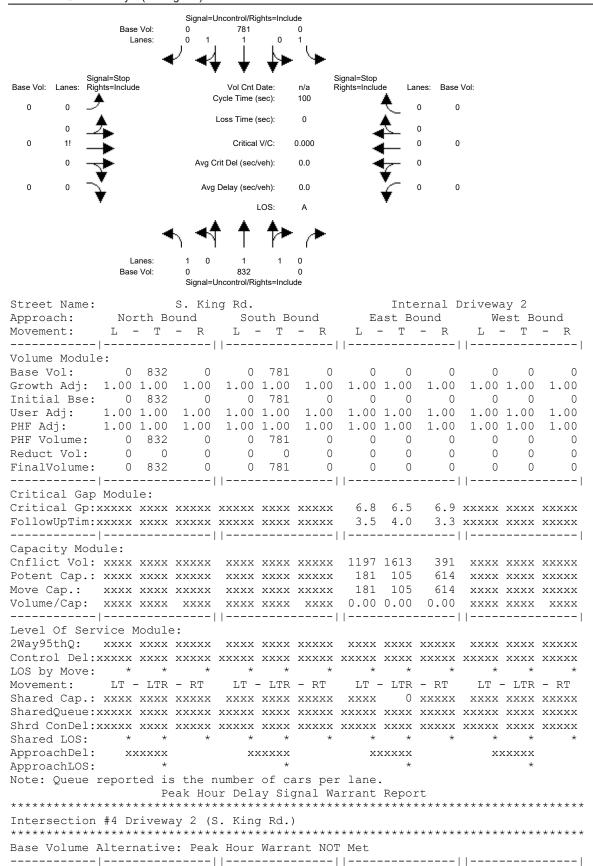
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## SIGNAL WARRANT DISCLAIMER

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#### Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) BG PM

## Intersection #4: Driveway 2 (S. King Rd.)



Approach:

North Bound

L - T - R

South Bound

East Bound West Bound

L-T-R L-T-R L-T-R

 
 Control:
 Uncontrolled
 Uncontrolled
 Stop Sign
 Stop Sign

 Lanes:
 1 0 1 1 0 1 0 1 0 0 0 1! 0 0 0 0 0
 0 0 0 0
 0 0 0 0 0 Initial Vol: 0 832 0 0 781 0 0 0 0 0 ApproachDel: XXXXXX XXXXXX XXXXXX XXXXXX -----| \_\_\_\_\_\_

#### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

Base Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 1 0 1 1 0 1 1 0 0 0 1! 0 0 0 0 0

Initial Vol: 0 832 0 0 781 0 0 0 0 0 0 0 -----||-----||------|

Major Street Volume: 1613
Minor Approach Volume: 0 Minor Approach Volume Threshold: 120

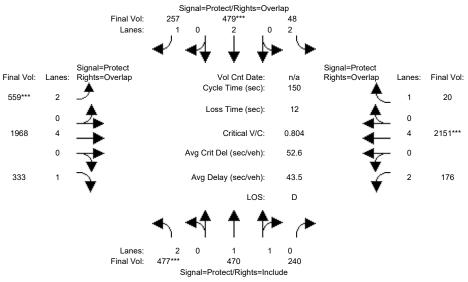
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#### SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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

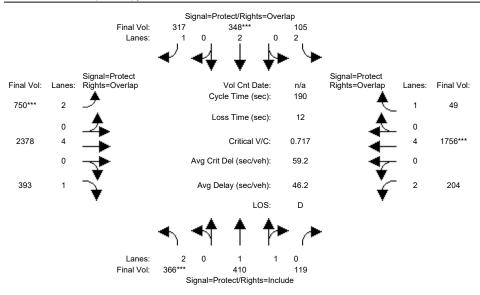
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name: Approach: Movement:	No	Si:	lver C	reek E	Rd.	und	F:	Cap	itol E	xpres	sway	uind
Movement:	L ·	- T	- R	L -	- T	- R	Г -	- T	- R	L -	- T	- R
Min. Green:		10		7						7		10
Y+R:		4.0			4.0				4.0	4.0	4.0	
Volume Module												
Base Vol:	477	469	240	48	479	254	550	1968	333	176	2151	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	469	240	48	479	254	550	1968	333	176	2151	20
Added Vol:	0	1	0	0	0	3	9	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	477	470	240	48	479	257	559	1968	333	176	2151	20
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:	477	470	240	48	479	257	559	1968	333	176	2151	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	477	470	240	48	479	257	559	1968	333	176	2151	20
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
FinalVolume:	477	470	240	48	479	257	559	1968	333	176	2151	20
	'											
Saturation F	low Mo	odule:										
Sat/Lane:		1900		1900	1900	1900	1900		1900	1900	1900	1900
Adjustment:				0.92		0.85		0.91	0.85		0.91	0.85
Lanes:				2.00			2.00		1.00		4.00	1.00
Final Sat.:					3610	1615		6916	1615		6916	1615
			,									
Capacity Anal	-											
Vol/Sat:		0.21	0.21	0.01	0.13	0.16		0.28	0.21	0.05	0.31	0.01
OTTO HOVOD.	****				****		****				****	
Green/Cycle:					0.17	0.36		0.50	0.67		0.39	0.45
Volume/Cap:			0.76	0.22		0.44		0.57	0.31		0.80	0.03
Delay/Veh:		53.6	53.6		68.1	36.6		26.7	10.6		42.8	23.1
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:				67.5		36.6		26.7	10.6		42.8	23.1
LOS by Move:			D	E		D	Ε	С	В	E	D	С
HCM2kAvgQ:				1	12	9			6	5	25	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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

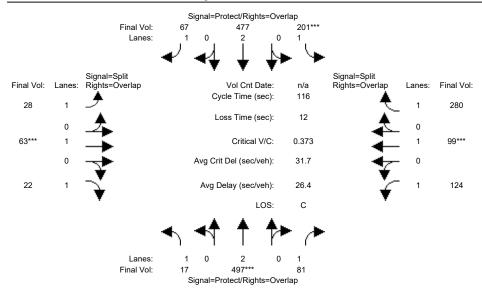
# Intersection #1: Capitol Expy / Silver Creek Rd.



Street Name: Approach:						und	F.	Cap	itol E	xpres	sway est Bo	und
Movement:	L	- T	- R	L -	- T	- R	L -	- T	- R	L ·	- Т	- R
Min. Green:		0		0			0				0	0
Y+R:		4.0			4.0		4.0					
Volume Module	e:											
Base Vol:	366	410	119	105	347	307	747	2378	393	204	1756	49
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:			119	105	347	307		2378	393	204	1756	49
	0	-	0	0	1	10	3	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	366	410	119	105	348	317	750	2378	393	204	1756	49
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:	366	410	119	105	348	317	750	2378	393	204	1756	49
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	366	410	119	105	348	317	750	2378	393	204	1756	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	366	410	119	105	348	317	750	2378	393	204	1756	49
Saturation Fi	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.95	0.85	0.92	0.91	0.85	0.92	0.91	0.85
Lanes:	2.00	1.55	0.45	2.00	2.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	3502	2703	784	3502	3610	1615	3502	6916	1615	3502	6916	1615
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.10	0.15	0.15	0.03	0.10	0.20	0.21	0.34	0.24	0.06	0.25	0.03
Crit Moves:	****				***		****				****	
Green/Cycle:	0.15	0.23	0.23	0.05	0.13	0.43	0.30	0.56	0.70	0.09	0.35	0.40
Volume/Cap:	0.72	0.65	0.65	0.65	0.72	0.45	0.72	0.62	0.35	0.62	0.72	0.08
Delay/Veh:	78.2	64.1	64.1	93.3	79.7	36.4	58.7	27.0	10.6	81.8	51.3	33.4
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:			64.1	93.3	79.7	36.4	58.7	27.0	10.6	81.8	51.3	33.4
LOS by Move:	Ε	E		F		D	Ε	С	В	F		С
HCM2kAvgQ:	11	14	14	3	10	12	20	24	8	6	23	2
Note: Queue			the n	umber	of ca	rs per	lane					

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

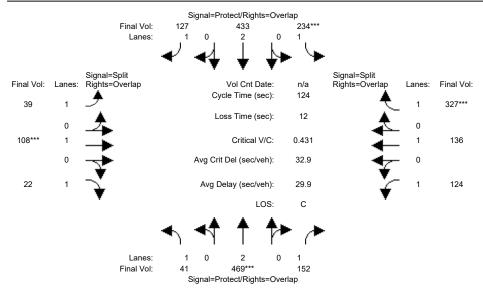
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Volume Module:
Base Vol: 17 487 81 201 474 67 28 63 22 124 99 279
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 17 487 81 201 474 67 28 63 22 124 99 279
Added Vol: 0 10 0 0 3 0 0 0 0 0 1
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 17 497 81 201 477 67 28 63 22 124 99 280
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 17 497 81 201 477 67 28 63 22 124 99 280
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 17 497 81 201 477 67 28 63 22 124 99 280
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 17 497 81 201 477 67 28 63 22 124 99 280
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.95 1.00 0.85 0.95 1.00 0.85
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00
Final Sat.: 1805 3610 1615 1805 3610 1615 1805 1900 1615 1805 1900 1615
Capacity Analysis Module:
Vol/Sat: 0.01 0.14 0.05 0.11 0.13 0.04 0.02 0.03 0.01 0.07 0.05 0.17
Crit Moves: *** *** *** ***
Green/Cycle: 0.21 0.37 0.55 0.30 0.46 0.55 0.09 0.09 0.30 0.18 0.18 0.48
Volume/Cap: 0.04 0.37 0.09 0.37 0.29 0.08 0.17 0.37 0.05 0.37 0.28 0.36
Delay/Veh: 36.6 26.9 12.2 32.5 19.7 12.4 49.4 51.2 29.0 42.1 41.2 19.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 36.6 26.9 12.2 32.5 19.7 12.4 49.4 51.2 29.0 42.1 41.2 19.0
LOS by Move: D C B C B B D D C D B
HCM2kAvgQ: 0 6 1 6 5 1 1 2 1 4 3 6
Note: Queue reported is the number of cars per lane.

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

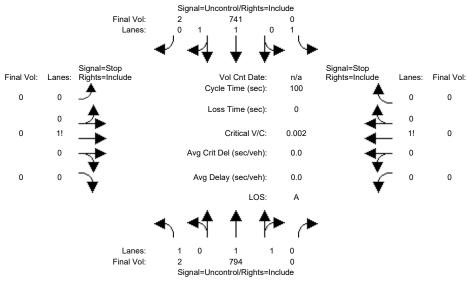
# Intersection #2: Silver Creek Road-S. King Rd. / Aborn Rd.



Street Name: Approach: Movement:			ek Roa und - R			Rd. ound - R					est Bo - T	
Movement.												
Min. Green:		0	,						0			0
Y+R:		4.0			4.0			4.0			4.0	4.0
Volume Module	e:											
Base Vol:	41	466	152	232	422	127	39	108	22	124	136	327
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:	41	466	152	232	422	127	39	108	22	124	136	327
Added Vol:	0	3	0	2	11	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	469	152	234	433	127	39	108	22	124	136	327
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:	41	469	152	234	433	127	39	108	22	124	136	327
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	469	152	234	433	127	39	108	22	124	136	327
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			152	234	433	127	39		22	124	136	327
Saturation F												
		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85	0.95	0.95	0.85		1.00	0.85	0.95		0.85
Lanes:		2.00	1.00		2.00	1.00		1.00	1.00	1.00		1.00
Final Sat.:			1615		3610	1615		1900	1615	1805		1615
Capacity Ana	-											
Vol/Sat:	0.02		0.09		0.12	0.08	0.02	0.06	0.01	0.07	0.07	0.20
Crit Moves:		****		****				****				****
Green/Cycle:			0.47		0.51	0.64		0.13	0.23	0.17		0.47
Volume/Cap:			0.20	0.43		0.12		0.43	0.06	0.41		0.43
Delay/Veh:			19.3		17.2	8.9		50.7	37.5	46.9		22.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				35.4		8.9		50.7	37.5	46.9		22.2
LOS by Move:				D		A	D	D	D	D	D	С
		7	3	7	-	2	1		1	4	5	8
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

#### Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) BGPP AM

# Intersection #3: Driveway 1 (S. King Road)



Street Name: S. King Rd Internal Driveway 1 Approach: North Bound South Bound East Bound West Bound	
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R	
Volume Module:	•
Base Vol: 1 794 0 0 741 1 0 0 0 0	0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Initial Bse: 1 794 0 0 741 1 0 0 0 0	0
Added Vol: 1 0 0 0 1 0 0 0 0	0
PasserByVol: 0 0 0 0 0 0 0 0 0 0	0
Initial Fut: 2 794 0 0 741 2 0 0 0 0	0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
PHF Volume: 2 794 0 0 741 2 0 0 0 0	0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0	0
FinalVolume: 2 794 0 0 741 2 0 0 0 0	0
Critical Gap Module:	
Critical Gp: 4.1 xxxx xxxxx xxxx xxxx xxxx 6.8 6.5 6.9 6.8 6.5	
FollowUpTim: 2.2 xxxx xxxxx xxxx xxxx xxxx 3.5 4.0 3.3 3.5 4.0	3.3
Capacity Module:	207
Cnflict Vol: 743 xxxx xxxxx xxxx xxxx xxxx 1143 1540 372 1169 1541  Potent Cap.: 873 xxxx xxxxx xxxx xxxx xxxx xxxx 197 117 632 189 116	397 608
	608
Volume/Cap: 0.00 xxxx xxxx xxxx xxxx xxxx 0.00 0.00 0.00 0.00	
Level Of Service Module:	
2Way95thQ: 0.0 xxxx xxxxx xxxx xxxx xxxx xxxx xxx	,,,,,,
Control Del: 9.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxxx	
LOS by Move: A * * * * * * * * * *	*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR -	- RT
	XXXXX
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx	
Shared LOS: * * * * * * * * * * * *	*
ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx	
ApproachLOS: * * * * *	
Note: Queue reported is the number of cars per lane.	
Peak Hour Delay Signal Warrant Report	
***********************	*****
Intersection #3 Driveway 1 (S. King Road)	*****
Future Volume Alternative: Peak Hour Warrant NOT Met	

Approach:	Nor	th B	ound	l	S	out	th Bo	oun	d		Eas	st B	oun	d		Wes	t Bo	und	£
Movement:	L -	Т	-	R	L	-	T	_	R	L	-	T	-	R	L	-	T	-	R
Control:	Unc	ontr	olle	ed	U	nco	ontr	o11	ed		Sto	p S	ign			Sto	p Si	.gn	
Lanes:	1 0	1	1	0	1	0	1	1	0	0	0	1!	0	0	0	0	1!	0	0
Initial Vol:	2	794		0		0	741		2		0	0		0		0	0		0
ApproachDel:	XX	XXXX				XXX	XXXX				XXX	XXXX				XXX	XXX		

#### SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Intersection #3 Driveway 1 (S. King Road)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

-----| Approach: North Bound South Bound East Bound West Bound Norum Possible L - T - R L - T - R L - T - R Movement: -----||-----||------| Uncontrolled Uncontrolled Stop Sign Stop Sign Control: 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0 Lanes: 0 0 1! 0 0 Initial Vol: 2 794 0 0 741 2 0 0 0 0 -----||-----||-----|

Major Street Volume: 1539 Minor Approach Volume: Minor Approach Volume Threshold: 136

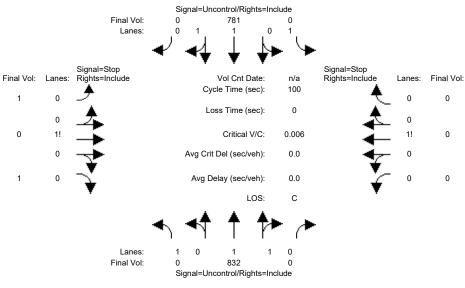
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## SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

## Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) BGPP PM

# Intersection #3: Driveway 1 (S. King Road)



		Olgital C	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	g	uo						
Street Name:			ng Rd					ernal I	Drivewa	ay 1	
Approach: No	rth_Bou	ınd	Sou	ith Bo	ound	Εā	ast Bo	ound	W€	est Bo	ound
Movement: L	– T –	- R	ь -	- T	– R	ь -	- T	- R		- T	
Volume Module:											
Base Vol: 0	832	0	0	781	0	0	0	0	0	0	0
Growth Adj: 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 0	832	0	0	781	0	0	0	0	0	0	0
Added Vol: 0	0	0	0	0	0	1	0	1	0	0	0
PasserByVol: 0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut: 0	832	0	0	781	0	1	0	1	0	0	0
User Adj: 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: 0	832	0	0	781	0	1	0	1	0	0	0
Reduct Vol: 0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume: 0	832	0	0	781	0	1	0	1	0	0	0
		1	1								
Critical Gap Modu	le:	,	'			' '					'
Critical Gp:xxxxx		xxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	7.5	6.5	6.9
FollowUpTim:xxxxx	xxxx x	XXXX	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	3.5		3.3
Capacity Module:		'	'			' '					'
Cnflict Vol: xxxx	xxxx x	. x x x x	xxxx	xxxx	xxxxx	1197	1613	391	1223	1613	416
Potent Cap.: xxxx						181	105	614	138	105	591
Move Cap.: xxxx									137		591
Volume/Cap: xxxx							0.00				0.00
Level Of Service			1			1 1					ļ
2Way95thQ: xxxx			VVVV	vvvv	VVVVV	VVVV	VVVV	VVVVV	VVVV	VVVV	xxxxx
Control Del:xxxxx											
LOS by Move: *						*				*	*
_	- LTR -				- RT			- RT	тт -	- LTR	_ DT
Shared Cap.: xxxx								XXXXX	XXXX		XXXXX
SharedQueue:xxxxx								XXXXX			
Shrd ConDel:xxxxx											
Shared LOS: *	*	*		*		*	17.9 C	*	*		*
bharca hob.							17.9				
	* * *		X2	XXXXX *			17.9 C		X2	XXXXX *	
ApproachLOS:		<b>_</b> la				. ]	-				
Note: Queue repor					_						
******						arrant					
										* * 7	
Intersection #3 D *******	******	/	******	, Koac	1 <i>)</i> *****	****	****	*****	*****	****	*****
Future Volume Alt	ernativ	re: Pe	ak Hou	ır War	rant 1	NOT Met	5				

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 1! 0 0 -----| Approach[eastbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=2] FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1615] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

\_\_\_\_\_\_

## SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #3 Driveway 1 (S. King Road)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| 

Major Street Volume: 1613
Minor Approach Volume: 2 Minor Approach Volume Threshold: 120

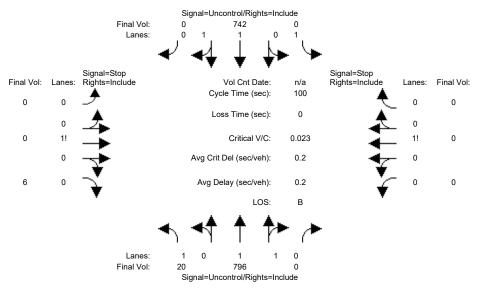
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## SIGNAL WARRANT DISCLAIMER

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#### Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) BGPP AM

# Intersection #4: Driveway 2 (S. King Rd.)



Street Name: Approach:	No:	rth Bo	S. Kir ound	ng Rd. Sou	uth Bo	ound	Ea	Inte	ernal I ound	Orivewa We	ay 2 est Bo	ound
Movement:	L -	- T	- R	L -	- Т	- R	L -	- T	- R	L -	- T	
Volume Module												
Base Vol:	10	795	0	0	742	0	0	0	3	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	10	795	0	0	742	0	0	0	3	0	0	0
Added Vol:	10	1	0	0	0	0	0	0	3	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
	20	796	0	0	742	0	0	0	6	0	0	0
User Adj:	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
PHF Volume:	20	796	0	0	742	0	0	0	6	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	796	0	0	742	0	0	0	6	0	0	0
Critical Gap									6 0		6 5	6 0
Critical Gp:												
FollowUpTim:	2.2	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	3.3	3.5		3.3
Capacity Modu									271	1007	1 . 7 0	200
Cnflict Vol:										141	1578 110	398 607
Potent Cap.:												607
Move Cap.:											108	0.00
Volume/Cap:												
Level Of Serv												
				17171717	.,.,,,,,	*********	17171717	.,,,,,,,	0.0	17171717	*******	1717171717
Control Del:			XXXXX							XXXXX		
LOS by Move:	9.2 A		*			*		*			*	*
Movement:			- RT			- RT			- RT		- LTR	_ DT
Shared Cap.:												XXXXX
SharedOueue:x											-	
Shrd ConDel:x												
Shared LOS:	*	*	*	*		*	*		*	*	*	*
ApproachDel:	×.	XXXXX		X	xxxx			10.8		X	xxxx	
ApproachLOS:	212	*		212	*			В		212	*	
Note: Queue r	renori	ed is	s the r	number	of ca	ars nei	· lane					
Noce, gaeae i	срот		eak Hou			-			rt			
*****	****									*****	****	*****
Intersection *******			4		,		· * * * * * * * * * * * * * * * * * * *	****	*****	****	****	*****
Future Volume												

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Initial Vol: 20 796 0 0 742 0 0 0 6 0 0
ApproachDel: xxxxxx xxxx xxxxx 10.8 xxxxxx -----| Approach[eastbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=6] FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1564] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches. \_\_\_\_\_

## SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

-----||-----||------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 1 1 0 1 0 1 0 0 0 0 1 0 0 1! 0 0
Initial Vol: 20 796 0 0 742 0 0 0 6 0 0 0 -----||-----||------|

Minor Approach Volume: 1558
Minor Approach Volume: 6 Minor Approach Volume Threshold: 132

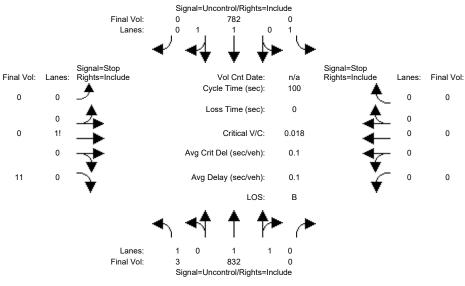
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## SIGNAL WARRANT DISCLAIMER

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## Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) BGPP PM

# Intersection #4: Driveway 2 (S. King Rd.)



Street Name:	S. Kind	a Rd	,···-			Tn+	ernal I	Orivewa	av 2	
	Bound		ıth Bo	nund	E.				st Bo	nind
	- R			- R			- R		- T	
Volume Module:	'	'			' '			' '		
Base Vol: 0 83	2 0	0	781	0	0	0	0	0	0	0
Growth Adj: 1.00 1.0		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 0 83		0	781	0	0	0	0	0	0	0
	0 0	0	1	0	0	0	11	0	0	0
PasserByVol: 0	0 0	0	0	0	0	0	0	0	0	0
Initial Fut: 3 83	2 0	0	782	0	0	0	11	0	0	0
User Adj: 1.00 1.0	0 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: 1.00 1.0		1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume: 3 83		0	782	0	0	0	11	0	0	0
Reduct Vol: 0	0 0	0	0	0	0	0	0	0	0	0
FinalVolume: 3 83	2 0	0	782	0	0	0	11	0	0	0
		1								
Critical Gap Module:	'									'
Critical Gp: 4.1 xxx	x xxxxx :	XXXXX	xxxx	XXXXX	XXXXX	XXXX	6.9	XXXXX	xxxx	XXXXX
FollowUpTim: 2.2 xxx								XXXXX		
Capacity Module:										
Cnflict Vol: 782 xxx	x xxxxx	XXXX	xxxx	XXXXX	XXXX	XXXX	391	XXXX	xxxx	XXXXX
Potent Cap.: 845 xxx	x xxxxx	XXXX	XXXX	XXXXX	XXXX	XXXX	614	XXXX	XXXX	XXXXX
Move Cap.: 845 xxx	x xxxxx	XXXX	XXXX	XXXXX	XXXX	XXXX	614	XXXX	XXXX	XXXXX
Volume/Cap: 0.00 xxx	x xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	0.02	XXXX	XXXX	XXXX
Level Of Service Modu	le:									
2Way95thQ: 0.0 xxx	x xxxxx	XXXX	XXXX	XXXXX	XXXX	XXXX	0.1	XXXX	XXXX	XXXXX
Control Del: 9.3 xxx	x xxxxx x					XXXX	11.0	XXXXX	XXXX	XXXXX
LOS by Move: A	* *	*	*	*	*	*	В	*	*	*
Movement: LT - LT	R - RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.: xxxx xxx	x xxxxx	XXXX	xxxx	XXXXX	XXXX	XXXX	XXXXX	XXXX	xxxx	XXXXX
SharedQueue:xxxxx xxx	x xxxxx x	XXXXX	xxxx	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	xxxx	XXXXX
Shrd ConDel:xxxxx xxx										XXXXX
Shared LOS: *	* *		*	*	*	*	*	*	*	*
ApproachDel: xxxxx		XX	XXXXX			11.0		XΣ	XXXX	
Approachios.	*		*			В			*	
Note: Queue reported										
	Peak Hou:									
******					*****	****	*****	*****	****	*****
Intersection #4 Drive					****	****	****	*****	****	*****
Future Volume Alterna	tive: Pea	ak Hou	ır Waı	rant 1	NOT Met	Ξ.				

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----||-----||-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 1 0 0 0 0 -----| Approach[eastbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=0.0] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=11] FAIL - Approach volume less than 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1628] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

\_\_\_\_\_

## SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Intersection #4 Driveway 2 (S. King Rd.)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Future Volume Alternative: Peak Hour Warrant NOT Met

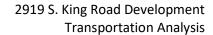
-----||-----||------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Lanes: 1 0 1 1 0 1 0 1 0 0 0 0 1 0 0 0 0
Initial Vol: 3 832 0 0 782 0 0 0 11 0 0 0 0 -----||-----||------|

Minor Approach Volume: 1617
Minor Approach Volume: 11 Minor Approach Volume Threshold: 119

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## SIGNAL WARRANT DISCLAIMER

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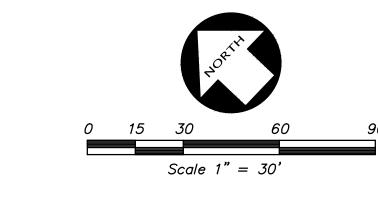


Appendices F – Warehouse Office Space Comparison

Warehouse Site Research			
Project	Office Space (ksf)	Warehouse Space (ksf)	% of Office Space
2919 S. King	6,100	90,023	6.8%
Silver Creek	10,000	216,873	4.41%
Qume-Bridge	20,000	714,491	2.72%
Rue Ferrari	10,000	302,772	3.20%
1605 7th Street	10,000	94,325	9.59%
2256 Junction TA	10,000	305,800	3.17%



Appendices G – Project Frontage Improvements to tie with S. King Road Vision Zero Planline Concepts



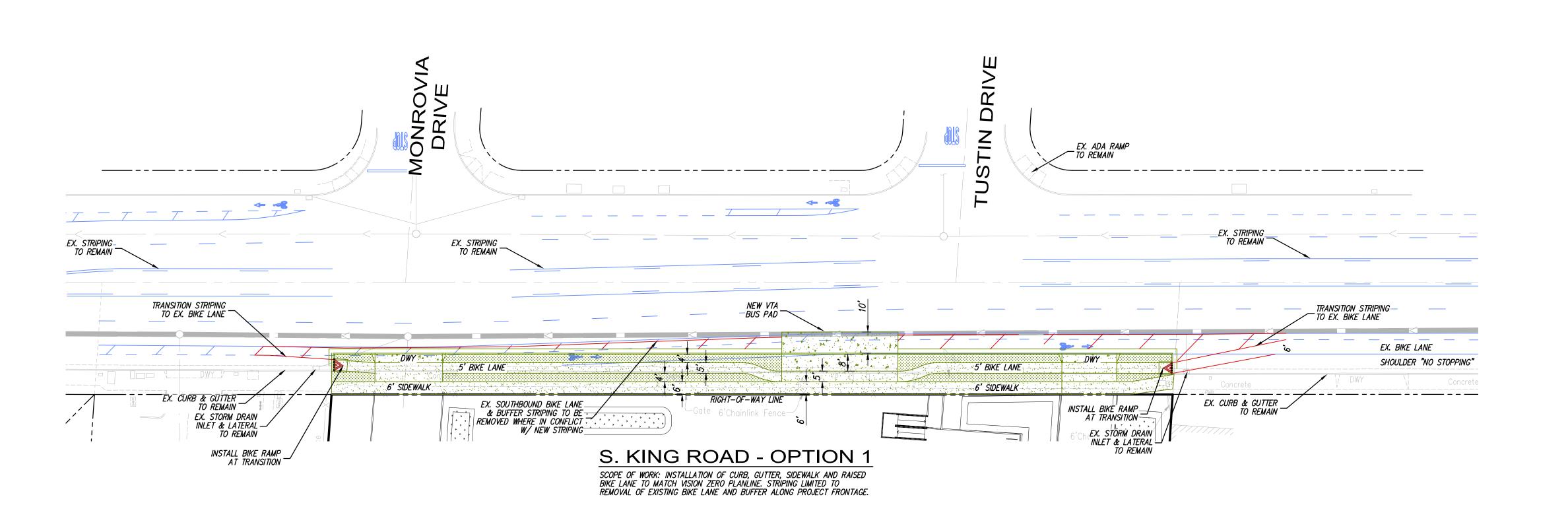


EXHIBIT KING ROAD DATE SCALE

KIER+WRIGHT

PLANLINE EX

OF

2905 S. KING R

DEC. 2022 1" = 30' DESIGNER

DRAWN STAFF JOB NO. A03228-5 SHEET