## 20957 & 20785 Baker Road Development Castro Valley, CA Transportation Impact Study



### **Draft Report**

Prepared For:

Alameda County

April 2017

Prepared By:



## 20957 & 20785 Baker Road Development Castro Valley, CA

#### TRANSPORTATION IMPACT STUDY

**DRAFT REPORT** 

Prepared For:
Alameda County



3301 C Street, Bldg. 100-B Sacramento, CA 95816 (916) 341-7760

April 2017

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#### **EXECUTIVE SUMMARY**

This report has been prepared to present the results of a Transportation Impact Study (TIS) performed by Wood Rodgers, Inc. for the proposed 20957 & 20785 Baker Road development project (Project) in Alameda County (County), California. This study has been performed to determine impacts the proposed Project may have on surrounding transportation facilities and potential mitigation measures that could be implemented to address significant impacts.

The proposed Project envisions redevelopment of two mostly vacant lots, with a combined size of approximately 1.13 acres, located at 20957 and 20785 Baker Road in the unincorporated community of Castro Valley in Alameda County, California. The Project proposes to demolish the one existing single-family dwelling unit home which currently occupies the site and construct 20 new townhomes in its place. The Project site is designated Residential Mixed Density (CBD-RMX) (20 dwelling units per acre) under the Central Business District Castro Valley General Plan. The Project also involves changing the existing residential and vacant land use of the site to For-Sale Condo land use.

#### PROJECT GENERATED TRIPS

New trips generated by the proposed Project were estimated using rates from the *Institute of Transportation Engineers Trip Generation Manual*, 9<sup>th</sup> Edition. Conservatively, this TIS assumed no reductions to the trips generated by ITE rates as the Project does not propose any mixed-use or commercial land uses and trips from existing land uses were minimal. The proposed Project is anticipated to generate a total of 159 daily trips, 14 AM peak hour trips (2 inbound and 12 outbound), and 16 PM peak hour trips (11 inbound and 5 outbound) under typical "annual average" traffic demand conditions.

#### INTERSECTION OPERATIONS, IMPACTS, AND MITIGATION MEASURES

This TIS report analyzed four (4) "study" intersections under "Existing" and "Existing plus Project" AM and PM peak hour conditions. HCM 2000 based analysis was performed using Synchro 9 software. CA-MUTCD based peak hour signal warrant-3 (urban areas) was also checked at all unsignalized study intersections. Level of service standards and significance criteria used in this TIS were based on Castro Valley standards and criteria used by other nearby cities.

All study intersections are currently operating and projected to operate at acceptable level of service during the AM and PM peak hours under "Existing" and "Existing plus Project" conditions. Based on the significance criteria used in this TIS, the Project was found to have "less than significant" impacts on all four (4) study intersections under "Existing plus Project" AM and PM peak hour conditions.

#### **ON-SITE PARKING**

The proposed project would provide approximately 3.05 parking spaces per unit (two garages spaces and approximately 1.05 visitor spaces per unit) which meets the minimum of two (2) parking spaces (at least one covered) and one (1) visitor space per townhome unit required by the Alameda County Townhome Design Guidelines. One (1) of the visitor spaces provided would be a disabled accessible parking stall.

#### TRANSIT IMPACTS

Project site residents could walk or bike to bus stops for AC Transit Route 32 and the Castro Valley BART station which are all located within 0.6 miles of the Project site. The increase in transit ridership caused by the proposed Project is not projected to be enough to significantly impact transit route delay or operations.

### PEDESTRIAN IMPACTS

Project site residents could access nearby CV Transit Bus Route 32 bus stops, the Castro Valley BART station, and nearby shopping centers via the existing pedestrian facilities on Castro Valley Boulevard, Baker Road, and other nearby local residential roads. Outside of the Project site, there are no currently planned Pedestrian improvements for study area facilities.

#### **BICYCLE IMPACTS**

Project site residents could access the CV Transit Bus Route 32 bus stops located on Castro Valley Boulevard and/or the Castro Valley BART station via bicycle using the existing class II bike lanes on Castro Valley Boulevard and/or the low volume nearby local residential streets in the Project area. According to the Castro Valley General Plan, class II bike lanes are proposed to be constructed on Castro Valley Boulevard between Redwood Road and Crow Canyon Road (filling in the current gap). These class II bike lanes, once constructed, could be utilized by future Project residents for better bicycle access to nearby destinations and transit stops.

#### 1. INTRODUCTION

This report has been prepared to present the results of a Transportation Impact Study (TIS) performed by Wood Rodgers, Inc. for the proposed 20957 & 20785 Baker Road development project (Project) in Alameda County (County), California. This study has been performed to determine impacts the proposed Project may have on surrounding transportation facilities and potential mitigation measures that could be implemented to address significant impacts. This introduction outlines project description, study area, analysis scenarios, analysis methods, significance criteria, and organization of the overall report.

#### 1.1 PROJECT DESCRIPTION

The proposed Project envisions development of two mostly vacant lots, with a combined size of approximately 1.13 acres, located at 20957 and 20785 Baker Road in the unincorporated community of Castro Valley in Alameda County, California. The Project site is generally located mid-block on the block of Baker Road that falls between Castro Valley Boulevard and Kerr Street. The Project site is bound by Baker Road to the east, Rutledge Road to the west, and various homes, apartments, and businesses to the north and south. The Project site location and vicinity map are shown in **Figure 1**.

The most recent Project site plan (by William Hezmalhalch Architects Inc., April 3, 2017) is shown in **Figure 2**. The Project proposes to demolish the one existing single-family dwelling unit home which currently occupies the mostly vacant site and construct 20 new townhomes in its place. The Project site is designated Residential Mixed Density (CBD-RMX) (20 dwelling units per acre) under the Central Business District Castro Valley General Plan. The Project also involves changing the existing residential and vacant land use of the site to For-Sale Condo land use.

Based on the site plan, access to and from the Project site is planned to be provided via a new full access egress stop-controlled driveway intersection that would extend west from Baker Road, approximately across from an existing private roadway, along the middle of the Project site.

#### 1.2 STUDY AREA

#### 1.2.1 Intersections

Study intersections were selected for analysis based on engineering judgement and coordination with County Public Works Agency staff. The following four (4) existing and proposed study intersections were analyzed in this TIS and are shown on **Figure 1**:

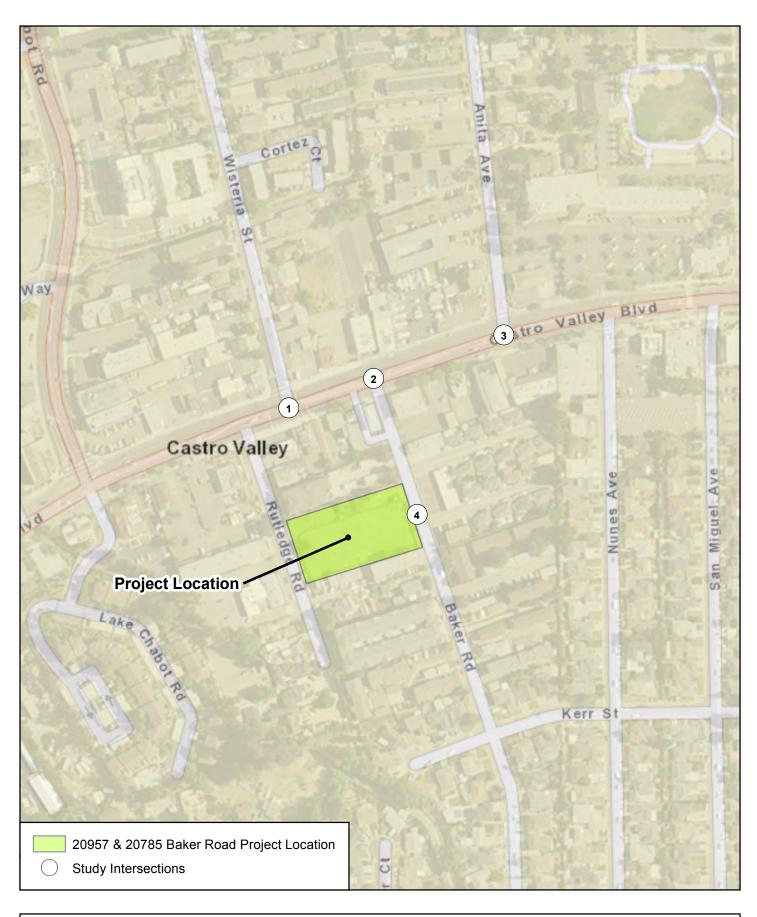
- 1. Castro Valley Boulevard / Wisteria Street
- 2. Castro Valley Boulevard / Baker Road
- 3. Castro Valley Boulevard / Anita Avenue
- 4. Baker Road / Project Access Driveway / Private Roadway

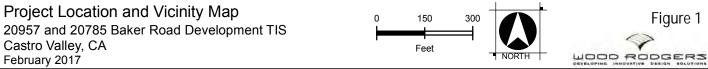
#### 1.2.2 PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

This TIS analyzes Project impacts on pedestrian, bicycle, and transit facilities located in the vicinity of the study area intersections listed above and which would be used to gain access to the Project site. This includes facilities on Baker Road, Castro Valley Boulevard, Wisteria Street, and Anita Avenue.

#### 1.3 Analysis Scenarios

The four (4) study intersections were evaluated under AM peak hour (highest hour of traffic between 7 and 9 AM) and PM peak hour (highest hour of traffic between 4 and 6 PM) conditions for the following scenarios:





#### **SETBACK DIAGRAM**

27.4' 11.9'



| PLAN 1 | PLAN 2 | PLAN 2 | PLAN 2 | PLAN 1X | 27.5 |
|--------|--------|--------|--------|---------|------|
| A A    | A LA   |        |        | A A     | 23.8 |
|        | HALA   | AA     | AA     |         |      |
|        |        |        |        |         | 28.0 |

27.4'

#### PROJECT SUMMARY

| THE TOTAL OF THE TAXABLE PROPERTY. |            |
|------------------------------------|------------|
| SITE ACREAGE:                      | 1.13 AC    |
| DWELLING UNITS:                    | 20 DU      |
| Plan 1                             | 4 DU       |
| Plan 1X                            | 4 DU       |
| Plan 2                             | 12 DU      |
| DENSITY:                           | 19.7 DU/AC |

#### **OPEN SPACE SUMMARY**

| PROVIDED COMMON OPEN SPACE | 2,972 sf |
|----------------------------|----------|
| REQUIRED COMMON OPEN SPACE | 2,000 sf |
| (Min. 100 SF / Unit)       |          |

PROVIDED PRIVATE OPEN SPACE 6,775 sf (Min. 336 SF / Unit) REQUIRED PRIVATE OPEN SPACE 1,500 sf (Min. 75 SF / Unit)

#### **PARKING SUMMARY**

(Min. 1 space / Unit)

| PROVIDED RESIDENTIAL PARKING      | 40 SPACES |
|-----------------------------------|-----------|
| REQUIRED RESIDENTIAL PARKING      | 40 SPACES |
| (Min. 2 spaces / Unit, 1 covered) |           |
| PROVIDED GUEST PARKING            | 21 SPACES |
| Driveway Spaces                   | 12 SPACES |
| Parallel Alley Spaces             | 2 SPACES  |
| Street Parking                    | 6 SPACES  |
| REQUIRED GUEST PARKING            | 20 SPACES |

#### Illustrative Site Plan

### Baker Road

Castro Valley, California CDPCV I Investors LLC

#### **UNIT SUMMARY**

#### LIVING SPACE:

| Plan 1   |        |         |
|----------|--------|---------|
| 1.917 SF | 3 bdrm | 13.5 ba |

#### FOOTPRINT:

| 1,048 SF             |
|----------------------|
| Second Floor         |
| 805 SF               |
| 76.8% of First Floor |

First Floor

Third Floor 732 SF 69.8% of First Floor

First Floor Porch

Second Floor Deck

#### Plan 2

1,972 SF | 4 bdrm | 3.5 ba

#### Plan 1X

2,068 SF | 3 bdrm | 3.5 ba

First Floor

Second Floor

1,158 SF

906 SF

#### First Floor 1,105 SF

Second Floor 823 SF 74.5% of First Floor

#### Third Floor 770 SF

69.6% of First Floor

#### First Floor Porch

Second Floor Deck

#### Third Floor 732 SF

63.2% of First Floor

78.2% of First Floor

#### First Floor

#### Porch

Second Floor Deck



April 03, 2017 SP 2016219

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- Existing Conditions: Existing traffic volumes from counts.
- Existing plus Project Conditions: Existing traffic volumes plus traffic projected to be generated by the proposed Project.

#### 1.4 ANALYSIS METHODS

Traffic operations in this TIS have been quantified through the determination of "Level of Service" (LOS). Level of Service is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment, representing progressively worsening traffic operations. LOS "A" represents free-flow conditions with little to no delays, while LOS "F" represents jammed or grid-lock conditions.

#### 1.4.1 Intersections

Intersection LOS has been calculated for all intersection control types using methods documented in the Transportation Research Board Publication *Highway Capacity Manual, Fourth Edition, 2000* (HCM-2000). For one-way-stop-controlled (OWSC) and two-way-stop-controlled (TWSC) intersections the "worst-case" movement delays and LOS are reported. For signalized and all-way-stop-controlled (AWSC) intersections the intersection delays and LOS reported are the "average" values for the whole intersection. The delay-based HCM-2000 LOS criteria for different types of intersection controls are outlined in **Table 1**.

Table 1. HCM-2000 Based Level-of-Service (LOS) Thresholds for Intersections

| Level of   |                                 |  |                   | n Control Delay<br>ds/vehicle)             |
|------------|---------------------------------|--|-------------------|--|
| Service    | Flow Type                       | Operational Characteristics  | Signal<br>Control | Two-Way-Stop<br>or All-Way<br>Stop Control |
| "A"        | Stable Flow                     | <u>&lt;</u> 10   | 0 – 10            |  |
| "B"        | Stable Flow                     | Good progression with slight delays. Short cycle-lengths typical. Relatively more vehicles stop than under LOS "A". Vehicle platoons are formed. Drivers begin to feel somewhat restricted within groups of vehicles.  | > 10 – 20         | > 10 – 15                                  |
| "C"        | Stable Flow                     | Relatively higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, although many still pass through without stopping. Most drivers feel somewhat restricted.                                 | > 20 – 35         | > 15 – 25                                  |
| "D"        | Approaching<br>Unstable<br>Flow | Somewhat congested conditions. Longer but tolerable delays may result from unfavorable progression, long cycle lengths, and/or high volume-to-capacity ratios. Many vehicles are stopped. Individual cycle failures may be noticeable. Drivers feel restricted during short periods due to temporary back-ups. | > 35 – 55         | > 25 – 35                                  |
| "E"        | Unstable<br>Flow                | Congested conditions. Significant delays result from poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures occur frequently. There are typically long queues of vehicles waiting upstream of the intersection. Driver maneuverability is very restricted.        | > 55 – 80         | > 35 – 50                                  |
| "F"        | Forced<br>Flow                  | Jammed or grid-lock type operating conditions. Generally considered to be unacceptable for most drivers. Zero or very poor progression, with over-saturation or high volume-to-capacity ratios. Several individual cycle failures occur. Queue spillovers from other locations restrict or prevent movement.   | > 80              | > 50                                       |
| Source: HC | M-2000, Exhibit:                | s 16-2, 17-2 and 17-22.  |                   |  |

For this TIS, calculated "Peak Hour Factor" (PHF) and a 2% heavy vehicle composition have been specified for each intersection under "Existing" and "Existing plus Project" peak hour analysis.

Synchro 9 operations analysis software was used to complete the HCM-2000 LOS analysis procedures for study intersections.

#### 1.5 Level of Service Standards and Impact Criteria

#### 1.5.1 Intersection Level of Service Impact Criteria

#### 1.5.1.1 Signalized Intersections

According to the Castro Valley General Plan, Circulation Chapter, Policy 6.2-1 (Alameda County Community Development Agency, March 2012), the community currently utilizes LOS "E" as the minimum acceptable LOS threshold for intersections that fall on a Congestion Management Program (CMP) Roadway. CMP roadways include: Castro Valley Boulevard, Center Street, Grove Way, Crow Canyon Road, and Redwood road. The community utilizes LOS "D" or better as the acceptable LOS threshold for all non-CMP roadway intersections during peak travel periods.

Based on LOS policy in the Castro Valley General Plan and criteria used by other cities within Alameda County, Project impacts at signalized intersections would be considered significant if one of the following criteria is met:

- 1. If the addition of project generated traffic to an intersection causes the AM or PM peak hour LOS of the intersection to degrade from an acceptable LOS ("E" or better for CMP intersections or "D" or better for non-CMP intersections) to an unacceptable LOS, then the impact is significant.
- 2. If an intersection operates at an unacceptable AM or PM peak hour LOS (LOS "F" for CMP intersections or LOS "E" or "F" for non-CMP intersections) without the addition of project generated traffic, and the addition of project generated traffic increases the average intersection control delay by four (4) seconds or more, then the impact is significant.

#### 1.5.1.2 Unsignalized Intersections

Castro Valley does not have an officially adopted significance criterion for unsignalized intersections. Based on criteria used by TISs for similar nearby projects, significant impacts are defined to occur when the addition of Project generated traffic causes the average intersection delay for all-way stop controlled intersections, or worst movement delay for one or two-way stop controlled intersections, to degrade to unacceptable levels <u>and</u> the intersection satisfies the CA-MUTCD peak-hour volume signal warrant.

#### 1.5.1.3 Signal Warrants

In order to determine whether traffic signals should be installed at currently unsignalized intersections, a supplemental *California Manual on Uniform Traffic Control Devices*, dated November 2014 (*CA-MUTCD*) based traffic signal warrant analysis was also completed. The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the need for installation of a traffic signal at an unsignalized intersection location. The CA-MUTCD signal warrant criteria are based upon several factors including volume of vehicular and pedestrian traffic, location of school areas, frequency and type of collisions, etc. CA-MUTCD indicates that "the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." This TIS evaluated CA-MUTCD based Peak-Hour-Volume-based Warrant 3 (Urban Areas) as a representative type of warrant analysis.

#### 1.6 REPORT ORGANIZATION

The remainder of this report is divided into the following chapters:

- Executive Summary
- Chapter 1: Introduction
- Chapter 2: Existing Conditions Describes existing conditions and operations of the study area intersections, roadways, transit system, pedestrian facilities, and bicycle facilities.
- Chapter 3: Existing Plus Project Conditions Describes the methods used to estimate and distribute Project generated traffic and the resulting study facilities operations.
- Chapter 4: Site Access and Circulation Describes site access and circulation for the Project site.
- Chapter 5: Potential Effects on Transit, Bicycle, and Pedestrian Facilities and Services Describes potential effects the proposed Project may have on the transit system, pedestrian facilities, and bicycle facilities.
- Chapter 6: Impacts and Mitigation Measures Describes the projected impacts the Project will have on study area facilities (if any) and presents potential mitigations.

#### 2. EXISTING CONDITIONS

This chapter describes the existing roadway network, transit services, pedestrian facilities, and bicycle facilities within the study area. It also presents existing volumes at study intersections as well as calculated delays and LOS.

#### 2.1 Existing Roadway Network

This section provides descriptions of the study area roadways.

Castro Valley Boulevard is a two to four lane arterial that runs east-west through the unincorporated community of Castro Valley. It begins as a four-lane arterial at the Foothill Boulevard / Mattox Road / Castro Valley Boulevard / I-238-I-580 Ramps intersection and continues east until reducing to a two lane arterial at Five Canyons Parkway. The road then crosses under I-580 and eventually terminates at Palo Verde Road where it becomes Dublin Canyon Road. The posted speed limit on Castro Valley Boulevard near the Project study area is 30 miles per hour. Two hour parking is allowed on both sides of Castro Valley Boulevard near the Project study area. Castro Valley Boulevard is defined as a CMP roadway under the Castro Valley General Plan Circulation Chapter.

**Wisteria Street** is a two lane local road / residential street that runs north-south in Castro Valley between Castro Valley Boulevard and Somerset Road. The posted speed limit on Wisteria Street is 25 miles per hours. On-street parking is generally allowed on both sides of Wisteria Street.

**Anita Avenue** is a two lane local road / residential street that runs north-south in Castro Valley between Castro Valley Boulevard and Somerset Road. The posted speed limit on Anita Avenue is 25 miles per hours. On-street parking is generally allowed on both sides of Anita Avenue.

**Baker Road** is a two lane local road / residential street that runs north-south in Castro Valley with a northern terminus at Castro Valley Boulevard and a southern terminus at a cul-de-sac just north of Norridge Avenue. The posted speed limit on Baker road is 25 miles per hours. On-street parking is generally allowed on both sides of Baker Road.

#### 2.2 PEDESTRIAN FACILITIES

Castro Valley Boulevard, Wisteria Street, and Baker Road all have continuous pedestrian sidewalks on both sides of the road within the Project study area. Anita Avenue has pedestrian sidewalks for most of its length within the project study area, however some sporadic segments have only asphalt sidewalks or no sidewalks.

The signalized Castro Valley Boulevard / Wisteria Street intersection has crosswalks with pedestrian push buttons on the north and east legs. The two-way-stop-controlled Castro Valley Boulevard / Baker Road intersection has a pedestrian crosswalk on the south leg only. The signalized Castro Valley Boulevard / Anita Avenue intersection has crosswalks with pedestrian push buttons on the north and west legs.

#### 2.3 BICYCLE FACILITIES

The Castro Valley General Plan classifies the City's existing and proposed bike and trail network into the following three categories (based on Chapter 1000 of the Caltrans Highway Design Manual):

<u>Class I</u>: Provides a completely separated facility designed for the exclusive use of bicyclists and pedestrians with crossing points minimized.

<u>Class II</u>: Provides a restricted right-of-way designated lane for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.

<u>Class III</u>: Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists.

Class II bikeways currently exist on the following segments of the study facilities:

• Castro Valley Boulevard between San Miguel Avenue and Redwood Road and between Crow Canyon Road and Five Canyons Parkway.

For Wisteria Street, Anita Avenue, and Baker Road it can be assumed that bicycles are allowed to share the roadway with vehicles.

#### 2.4 Existing Transit Service

Transit services are provided by the Alameda-Contra Costa Transit District (AC District) and Bay Area Rapid Transit (BART) within Castro Valley and the Project study area. These agencies and the transit routes they provide within/nearby the project study area are described in this section.

#### **Alameda-Contra Costa Transit District (AC District)**

AC Transit operate eight (8) bus routes through Castro Valley, and four (4) additional routes that serve the surrounding area. AC Transit buses serve the Castro Valley BART station, downtown, nearby medical facilities, and recreation areas. Paratransit service is also provided for users with special needs. The following bus routes operate within the vicinity of the Project study area:

**Bus Route 32** is a two-way loop that runs in Castro Valley, North Hayward, Cherryland, and Ashland. The route has major stops at the Hayward BART station, the Bay Fair BART station, and the Castro Valley BART station. It provides service every hour, in both directions, from 5:00 AM to 9:00 PM on weekdays and from 6:40 AM to 7:30 PM on weekends. Bus Route 32 has stops on the southwest corner of the Castro Valley Boulevard / Baker Road intersection and on the northeast corners of the Castro Valley Boulevard / Wisteria Street and Castro Valley Boulevard / Anita Avenue intersections within the Project study area.

#### **Bay Area Rapid Transit (BART)**

BART provides a system of grade-separated, electric heavy rail trains that transport passengers throughout the Bay Area. The Castro Valley BART station, which is a stop of the Dublin-Pleasanton line, is located on the southwest corner of the Redwood Road / Norbridge Avenue intersection, about a 0.6 mile walk or bike ride from the Project site. The Dublin-Pleasanton line provides direct service to Oakland, San Francisco, and the San Francisco International Airport. Additionally, the Bay Fair station (located in San Leandro) can be used to transfer between the Dublin-Pleasanton and Fremont-Richmond lines and the Hayward station (located in Hayward) can be used to transfer between the Fremont-Richmond and Fremont-Daly City lines.

#### 2.5 Existing Traffic Volumes and Intersection Lane Geometrics

Project study intersection traffic operations were evaluated for the AM and PM peak hours. The AM peak hour is defined as the highest one hour of traffic flow counted between 7:00 AM and 9:00 AM on a typical weekday and the PM peak hour is defined as the highest one hour of traffic flow counted between 4:00 PM and 6:00 PM on a typical weekday.

Wood Rodgers conducted new AM and PM peak hour vehicular, pedestrian, and bicycle traffic counts at all study intersections on Tuesday, January 31, 2017. Figure 3 illustrates existing intersection lane geometrics and control and Figure 4 illustrates "Existing" conditions traffic volumes.

#### 2.6 "EXISTING" INTERSECTION OPERATIONS

**Table 2** presents existing study intersection traffic operations analysis under existing intersection geometrics and control (illustrated in Figure 3) and "Existing" intersection traffic volumes (illustrated in **Figure 4**).

|   | Table 2. "Existing" Conditions Intersection Traffic Operation |         |          |      |       |  |  |  |  |
|---|---|---------|----------|------|-------|--|--|--|--|
|   |   | Control | LOS      | Peak | Exist |  |  |  |  |
| # | Intersection  | Type    | Criteria |      | Delay |  |  |  |  |

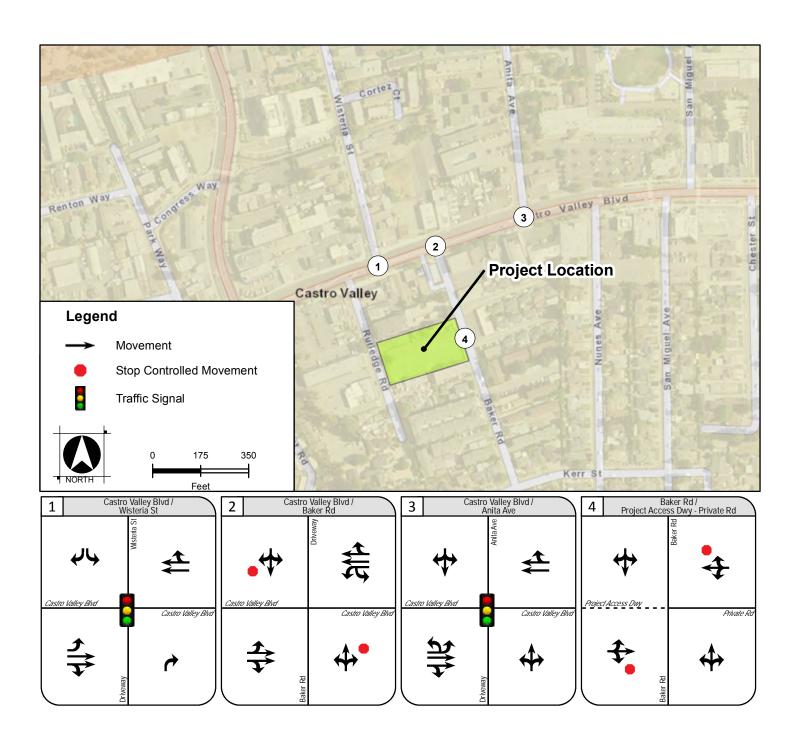
|   |  | Control | LOS      | Peak | Existing Conditions         |     |                           |  |
|---|--|---------|----------|------|-----------------------------|-----|---------------------------|--|
| # | Intersection                                   | Туре    | Criteria | Hour | Delay<br>(S/V) <sup>1</sup> | LOS | Wrnt<br>Met? <sup>2</sup> |  |
| 1 | Contro Valley Bouleyard / Winteria Street      | Signal  | Е        | AM   | 11.3                        | В   | -                         |  |
| ' | Castro Valley Boulevard / Wisteria Street      | Signal  | _        | PM   | 15.2                        | В   | -                         |  |
|   | Costro Valley Paulovard / Paker Pand           | TWSC    | TWSC E   | AM   | 15.4                        | С   | No                        |  |
|   | Castro Valley Boulevard / Baker Road           |         |          | PM   | 24.3                        | С   | No                        |  |
|   | Cootro Valley Deuleyard / Anite Avenue         | Cianal  | E        | AM   | 16.9                        | В   | -                         |  |
| 3 | Castro Valley Boulevard / Anita Avenue         | Signal  | -        | PM   | 12.2                        | В   | -                         |  |
| 4 | Baker Road / Project Access Driveway / Private | TWSC    | 2        | AM   | 8.7                         | Α   | No                        |  |
| 4 | 4 Roadway <sup>3</sup>                         |         | D        | PM   | 8.6                         | Α   | No                        |  |

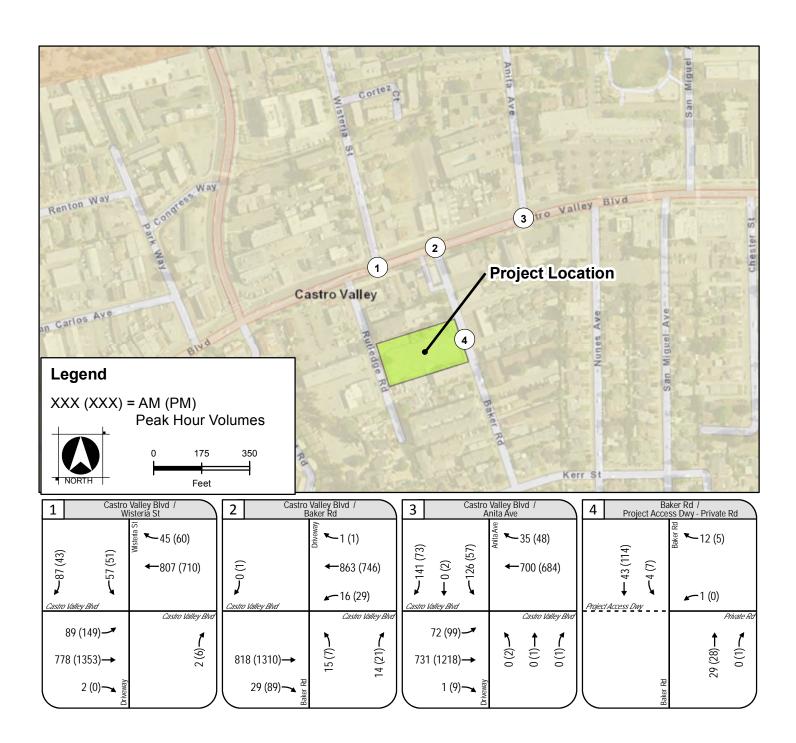
Notes: 1. For TWSC (Two-Way-Stop-Control) intersections, "worst-case" movement delay is indicated. "Average" control delays (in seconds/vehicle) are indicated for Signal-Control intersections.

As shown in Table 2, all of the study intersections are currently operating at acceptable level of service conditions during the AM and PM peak hours. CA-MUTCD based peak hour signal warrant-3 (urban areas) is not projected to be met at any of the unsignalized study intersections. Synchro software intersection LOS outputs are included in Appendix Exhibit A and CA-MUTCD signal warrant-3 worksheets are included in **Appendix Exhibit B.** 

<sup>2.</sup> Wrnt Met? = CA-MUTCD based Peak-hour-Volume Warrant #3 (Urban Areas)

<sup>3.</sup> Under "Existing Conditions" Intersection 4 consists solely of Baker Road and the Private Roadway that lies approximately across from where the proposed Project Access Driveway will be constructed. BOLD indicates unacceptable level of service.





All recommended improvements and mitigation measures are discussed in a subsequent section of this TIS report.

#### 3. EXISTING PLUS PROJECT CONDITIONS

This chapter provides a description of the proposed Project, a discussion of the Project trip generation and distribution/assignment methods used to forecast Project-only volumes at study intersections, and analysis of traffic operations and impacts due to the proposed Project.

#### 3.1 PROJECT SITE

#### 3.1.1 PROJECT SITE DESCRIPTION

The proposed Project would demolish the one (1) single family residential unit that currently occupies the approximately 1.13 acre, mostly vacant Project site and construct 20 townhomes in its place. The proposed site would consist of four (4) new buildings, arranged in two rows of two. Each building would contain five (5) townhomes. The Project would provide 40 garage spaces (2 per unit) for residents as well as 12 driveway spaces, six (6) on-street spaces, two (2) parallel alley spaces, and one (1) disabled accessible parallel alley space for guests (approximately 1.05 guest stalls per unit). Driveways would be provided along the proposed Project internal roadway that would run through the middle of the site. The on-street parking spaces would be provided along the west side of Baker Road fronting the Project site. The three (3) total parallel alley spaces would be provided in the middle of the Project site, central to all four proposed townhome buildings. Overall the proposed Project site would have 61 total spaces and an average of 3.05 spaces per unit.

The Project would gain access to the local road network via a single new Project access driveway / proposed internal road that would extend west from Baker Road, approximately across from an existing private roadway, along the entire length of the middle of the Project site. The Project would have no access to Rutledge Road located directly to the west, behind the Project site. The west side of the proposed internal road would terminate in a hammer-head turn for emergency vehicles. The Project would reconstruct sidewalk along the west side of Baker Road fronting the Project site if necessary.

#### 3.2 PROJECT GENERATED TRIPS

#### 3.2.1 TRIP GENERATION

This TIS used *Institute of Transportation Engineers (ITE) Trip Generation Manual, 9<sup>th</sup> Edition* rates to estimate Project trip generation. The entire proposed development Project can essentially be characterized as the Residential Condominium/Townhouse land use. The following trip generation rates from the ITE were used to estimate Project generated trips:

**Residential Condominium/Townhouse** – For the proposed Project's 27 townhome units, the "Residential Condominium/Townhouse" (Use Code 230) trip generation rate is used. ITE Trip Generation describes Residential Condominium/Townhouse as: "... ownership units that have at least one other owned unit within the <u>same building structure</u>."

As the Project does not propose any mixed-use or commercial land uses, this TIS conservatively assumed no reductions to the trips generated by ITE rates. Additionally, since there was only a very small number of single family residential units on the site currently, it was conservatively assumed that no trip reductions would be applied to the new development to account for the displaced trips.

**Table 3** summarizes the trip generation rates used for the proposed Project and **Table 4** summarizes the trip generation volumes for the proposed project.

**Table 3. Project Trip Generation Rates** 

| Land Use Category                    | Source ITE<br>Code |      |                 | Daily<br>Trip          | Weekday AM Peak<br>Hour Rate/Unit |     |      | Weekday PM Peak<br>Hour Rate/Unit |     |      |
|--------------------------------------|--------------------|------|-----------------|------------------------|-----------------------------------|-----|------|-----------------------------------|-----|------|
|                                      | Code               | Code | Unit            | Rate/Unit <sup>1</sup> | Total                             | In% | Out% | Total                             | In% | Out% |
| Residential<br>Condominium/Townhouse | ITE                | 230  | DU <sup>2</sup> | 7.95                   | 0.70                              | 17% | 83%  | 0.80                              | 67% | 33%  |

Notes: <sup>1</sup>Calculated trip rates were used in this analysis using the fitted curve equations, consistent with information contained in the ITE Publication Trip Generation (Ninth Edition)

 $^{2}DU = Dwelling\ Unit$ 

#### **Table 4. Project Trip Generation Volumes**

| Land Use                          | Units           | Quantity | Daily<br>Trips |       | day AM<br>our Trips |     |       | day PM<br>our Trip |     |
|-----------------------------------|-----------------|----------|----------------|-------|---------------------|-----|-------|--------------------|-----|
|                                   | Ullits          | Quantity | TTIPS          | Total | In                  | Out | Total | In                 | Out |
| Residential Condominium/Townhouse | DU <sup>2</sup> | 20       | 159            | 14    | 2                   | 12  | 16    | 11                 | 5   |

Notes:  $^{1}$ The trips illustrated in this table are based on ITE Trip Generation ( $9^{th}$  Edition) calculated trip rates, using the fitted curve equations.  $^{2}$ DU = Dwelling Unit

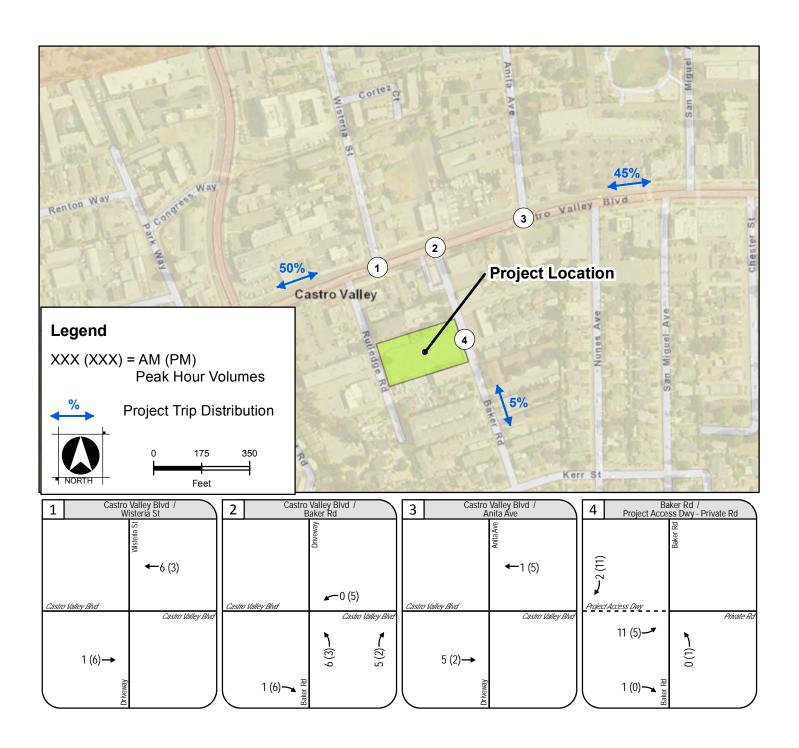
As illustrated in **Table 4**, the proposed Project is anticipated to generate a total of 159 daily trips, 14 AM peak hour trips (2 inbound and 12 outbound), and 16 PM peak hour trips (11 inbound and 5 outbound) under typical "annual average" traffic demand conditions. These trips would be considered "new" (or incremental) trips on the City's immediate local circulation system.

#### 3.2.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Project trips were assigned to the study area network based on existing traffic volumes, observed travel patterns, daily travel pattern information contained in the Castro Valley General Plan, and routes to major freeways within the study area. **Figure 5** illustrates the estimated Project directional trip distribution and assignment patterns projected to be generally applicable for the Project under existing conditions, on an annualized average usage basis. **Figure 5** also illustrates the estimated AM and PM peak hour "Project Only" traffic volumes projected to be applicable under existing conditions. "Project Only" traffic volumes were also added on top of "Existing" conditions traffic volumes at study intersections, to estimate "Existing plus Project" conditions traffic volumes at study intersections

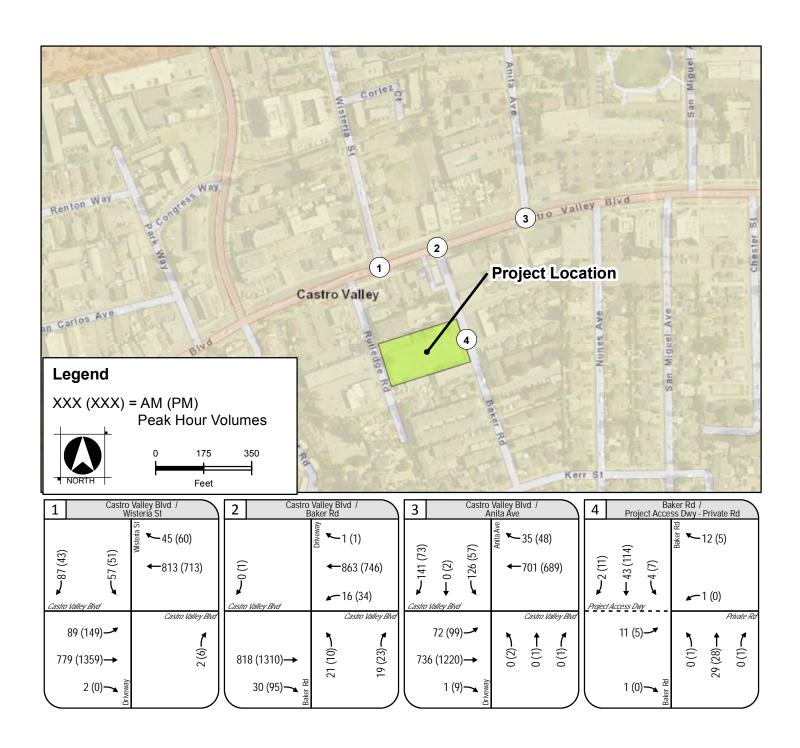
#### 3.3 "EXISTING PLUS PROJECT" INTERSECTION OPERATIONS

"Existing plus Project" intersection operations were analyzed under the "Existing plus Project" traffic volumes (shown in **Figure 6**) and existing intersection lane geometrics and control (shown in **Figure 3**). **Table 5** illustrates the resulting "Existing plus Project" intersection LOS operations. **Table 5** also contains "Existing" conditions intersection delays and LOS for comparison purposes, as well as the projected change in intersection delay caused by the addition of Project generated trips. The projected change in intersection delay was reported for use in identifying significant impacts at signalized intersections.



Project Trip Distribution and "Project Only" Traffic Volumes 20957 & 20785 Baker Road Development Castro Valley, CA February 2017

Figure 5



"Existing plus Project" Traffic Volumes 20957 & 20785 Baker Road Development Castro Valley, CA February 2017



**Existing Conditions Existing plus Project Conditions** Control LOS Peak Intersection Delay Delay Wrnt Change Type Criteria Hour LOS LOS Met?2 Met?2 (S/V)1 (S/V)1 in Delay AM 11.3 В 11.3 В 0.0 Castro Valley Boulevard / Ε 1 Signal Wisteria Street PM 15.2 В 15.2 В 0.0 C AM 15.4 Nο 16.1 C Nο 0.7 Castro Valley Boulevard / 2 **TWSC** Ε Baker Road PM 24.3 С D No 29.7 No 5.4 AM 16.9 В 16.9 В 0.0 Castro Valley Boulevard / Ε Signal Anita Avenue PM 12.2 В 12.2 В 0.0 AM 8.7 Α No 9.6 Α No 0.9 Baker Road / Project Access Driveway / TWSC D PM 8.6 No 10.6 Private Roadway<sup>3</sup> 2.0

Table 5. "Existing plus Project" Conditions Intersection Traffic Operations

Notes: 1. For TWSC (Two-Way-Stop-Control) intersections, "worst-case" movement delay is indicated. "Average" control delays (in seconds/vehicle) are indicated for Signal-Control intersections.

**BOLD** indicates unacceptable level of service.

As shown in **Table 5**, all of the study intersections are currently operating at acceptable level of service conditions during the AM and PM peak hours. CA-MUTCD based peak hour signal warrant-3 (urban areas) is not projected to be met at any of the unsignalized study intersections. Synchro software intersection LOS outputs are included in **Appendix Exhibit A**, and CA-MUTCD signal warrant-3 worksheets are included in **Appendix Exhibit B**.

All recommended improvements and mitigation measures are discussed in a subsequent section of this TIS report.

#### 4. SITE ACCESS AND CIRCULATION

This chapter reviews the proposed Project site plan, including discussion of site access roadways, internal queuing, internal circulation, pedestrian and bicycle facilities, and on-site parking.

#### 4.1 Project Access Driveway

The proposed Project would gain access to the nearby roadway network via one (1) new Project access driveway/roadway. The new Project driveway is proposed to intersect Baker Road at a new full-access driveway intersection, approximately across from an existing private roadway, and extend west along the middle of the Project site for its full length. The proposed Project access driveway intersection with Baker Road would be single lane in, single lane out, and egress stop-controlled, with Baker Road traffic having the right-of-way.

The proposed project driveway would intersect Baker Road at a 90-degree angle, similar to adjacent multi-residential uses along Baker Road. Therefore, red curb and/or "No Parking" would be required within project driveway intersection vicinity.

#### 4.1.1 INTERNAL QUEUEING AT PROJECT ACCESS DRIVEWAY

Since there is only one (1) proposed internal roadway in the Project site, the proposed Project driveway at Baker Road could essentially accommodate eastbound vehicular queueing up to the entire length of the Project site (approximately 275 feet or 11 vehicles). Based on HCM-2000 Synchro analysis performed for the Project access driveway intersection, it is projected that the Project access driveway would have a worst-case "Existing plus Project" peak hour egress

<sup>2.</sup> Wrnt Met? = CA-MUTCD based Peak-hour-Volume Warrant #3 (Urban Areas)

<sup>3.</sup> Under "Existing Conditions" Intersection 4 consists solely of Baker Road and the Private Roadway that lies approximately across from where the proposed Project Access Driveway will be constructed.

(eastbound) queue of approximately 50 feet (or two vehicles), which is 225 feet less than the available storage. The Project access driveway queue storage length is projected to be adequate.

#### 4.2 Internal Circulation

The proposed internal roadway in the Project site plan would allow two-way traffic. There are no proposed internal intersections. Passenger vehicles/trucks could use the three-point-turn method or back out of parking stalls to turn around in the Project site. Emergency vehicles could use the hammer-head on the western side of the site to turn around / make a U-turn. Traffic volumes on the proposed internal Project site roadway are not projected to be large enough to require other traffic control improvements. No other internal street improvements are recommended.

#### 4.3 PEDESTRIAN AND BICYCLE ACCESS AND CIRCULATION

Due to the small nature of the proposed site, no dedicated bicycle facilities are proposed. Bicyclists can share the proposed on-site roadway with vehicles to navigate the Project site and access Baker Road and the nearby existing bicycle facilities. The Project proposes pedestrian walkways running east/west along both the north and south edges of the site, with north/south pedestrian walkways providing access to and from the guest parking stalls at the middle of the site. Pedestrians on site would be able to use these proposed walkways to access Baker Road, nearby existing and proposed pedestrian facilities, and any of the town home buildings.

#### 4.4 ON-SITE PARKING

The Project would provide 40 garage spaces (2 per unit) for residents as well as 12 driveway spaces, six (6) on-street spaces, two (2) parallel alley spaces, and one (1) disabled accessible parallel alley space for guests (approximately 1.05 guest stalls per unit). Overall the proposed Project site would have 61 total spaces and an average of 3.05 spaces per unit. According to the Alameda County Design Guidelines for Townhomes and Small-Lot Single Family Homes on Narrow Lots (prepared for Alameda County Community Development Agency by Dyett & Bhatia Urban and Regional Planners and Kahn Mortimer Associates, March 23, 2009) newly constructed townhomes are required to provide a minimum of two (2) parking spaces per unit (one of which must be covered) and a minimum of one (1) guest parking space per unit for units that are greater than 1,000 square feet. Therefore, the proposed Project site is projected to meet the City's parking requirements by providing two (2) covered parking spaces and 1.05 guest spaces per unit.

## 5. POTENTIAL EFFECTS ON TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES AND SERVICES

This section discusses projected Project impacts on study area transit, bicycle, and pedestrian facilities.

#### 5.1 TRANSIT IMPACTS

Project site residents could walk or bike to several bus stops for AC Transit Route 32 which are located along Castro Valley Boulevard within 1,000 feet of the Project site. The Castro Valley BART station is also located approximately 0.6 miles southeast of the Project site, within reasonable walking or bicycling distance.

The increase in transit ridership caused by the proposed Project is not projected to be enough to significantly impact transit route delay or operations.

#### **5.2 PEDESTRIAN IMPACTS**

Project site residents could access the CV Transit Bus Route 32 bus stops located on Castro Valley Boulevard on foot via the continuous existing sidewalks provided on Baker Road and Castro Valley Boulevard, as well as the pedestrian crosswalks with push buttons located at the Castro Valley Boulevard intersections with Wisteria Street and Anita Avenue. Project site residents could use those same pedestrian facilities as well as the continuous sidewalks provided on neighboring local residential streets to reach the Castro Valley BART station as well. A large shopping center, including a Safeway, located approximately half a mile northeast of the Project could be easily accessed by residents on foot as well.

Outside of the Project site, there are no currently planned Pedestrian improvements for study area facilities.

#### **5.3 BICYCLE IMPACTS**

Project site residents could access the CV Transit Bus Route 32 bus stops located on Castro Valley Boulevard and/or the Castro Valley BART station via bicycle using the existing class II bike lanes on Castro Valley Boulevard and/or the low volume nearby local residential streets in the Project study area.

According to the Castro Valley General Plan, class II bike lanes are proposed to be constructed on Castro Valley Boulevard between Redwood Road and Crow Canyon Road (filling in the current gap). These class II bike lanes, once constructed, could be utilized by future Project residents for better bicycle access to nearby destinations and transit stops.

#### 6. IMPACTS AND MITIGATION MEASURES

This chapter of the TIS evaluates the study intersection operations results presented in **Table 5** ("Existing plus Project" conditions) against the LOS impact criteria summarized in Section 1.5 of this report.

#### 6.1 "EXISTING PLUS PROJECT" IMPACTS AND MITIGATION MEASURES

All of the study intersections are currently operating and projected to operate at acceptable level of service during the AM and PM peak hours under "Existing" and "Existing plus Project" conditions. Therefore, Project impacts at all study intersections are projected to be "less than significant".

# Appendix Exhibit A Intersection Level of Service Outputs

|  | ۶            | <b>→</b>     | •            | •    | <b>←</b>     | 4            | 1       | †    | ~            | <b>/</b>     | <b>+</b> | ✓            |
|--|--------------|--------------|--------------|------|--------------|--------------|---------|------|--------------|--------------|----------|--------------|
| Movement   | EBL          | EBT          | EBR          | WBL  | WBT          | WBR          | NBL     | NBT  | NBR          | SBL          | SBT      | SBR          |
| Lane Configurations                                  | 7            | <b>∱</b> ∱   |              |      | <b>ተ</b> ኈ   |              |         |      | 7            | ሻ            |          | 7            |
| Traffic Volume (vph)                                 | 89           | 778          | 2            | 0    | 807          | 45           | 0       | 0    | 2            | 57           | 0        | 87           |
| Future Volume (vph)                                  | 89           | 778          | 2            | 0    | 807          | 45           | 0       | 0    | 2            | 57           | 0        | 87           |
| Ideal Flow (vphpl)                                   | 1900         | 1900         | 1900         | 1900 | 1900         | 1900         | 1900    | 1900 | 1900         | 1900         | 1900     | 1900         |
| Total Lost time (s)                                  | 4.0          | 4.0          |              |      | 4.0          |              |         |      | 4.0          | 4.0          |          | 4.0          |
| Lane Util. Factor                                    | 1.00         | 0.95         |              |      | 0.95         |              |         |      | 1.00         | 1.00         |          | 1.00         |
| Frpb, ped/bikes                                      | 1.00         | 1.00         |              |      | 1.00         |              |         |      | 0.98         | 1.00         |          | 1.00         |
| Flpb, ped/bikes<br>Frt                               | 1.00<br>1.00 | 1.00<br>1.00 |              |      | 1.00<br>0.99 |              |         |      | 1.00<br>0.86 | 1.00<br>1.00 |          | 1.00<br>0.85 |
| Fit Protected  | 0.95         | 1.00         |              |      | 1.00         |              |         |      | 1.00         | 0.95         |          | 1.00         |
| Satd. Flow (prot)                                    | 1770         | 3537         |              |      | 3502         |              |         |      | 1585         | 1762         |          | 1583         |
| Flt Permitted  | 0.95         | 1.00         |              |      | 1.00         |              |         |      | 1.00         | 0.95         |          | 1.00         |
| Satd. Flow (perm)                                    | 1770         | 3537         |              |      | 3502         |              |         |      | 1585         | 1762         |          | 1583         |
| Peak-hour factor, PHF                                | 0.72         | 0.72         | 0.72         | 0.91 | 0.91         | 0.94         | 0.50    | 0.50 | 0.50         | 0.78         | 0.78     | 0.78         |
| Adj. Flow (vph)                                      | 124          | 1081         | 3            | 0.71 | 887          | 48           | 0.00    | 0.00 | 4            | 73           | 0.70     | 112          |
| RTOR Reduction (vph)                                 | 0            | 0            | 0            | 0    | 4            | 0            | 0       | 0    | 3            | 0            | 0        | 80           |
| Lane Group Flow (vph)                                | 124          | 1084         | 0            | 0    | 931          | 0            | 0       | 0    | 1            | 73           | 0        | 32           |
| Confl. Peds. (#/hr)                                  |              |              | 11           |      |              | 14           |         |      | 4            | 4            |          |              |
| Confl. Bikes (#/hr)                                  |              |              | 1            |      |              | 2            |         |      |              |              |          |              |
| Turn Type  | Prot         | NA           |              |      | NA           |              |         |      | Perm         | Perm         |          | Perm         |
| Protected Phases                                     | 7            | 4            |              |      | 8            |              |         |      |              |              |          |              |
| Permitted Phases                                     |              |              |              |      |              |              |         |      | 2            | 6            |          | 6            |
| Actuated Green, G (s)                                | 11.2         | 56.0         |              |      | 40.8         |              |         |      | 26.0         | 26.0         |          | 26.0         |
| Effective Green, g (s)                               | 11.2         | 56.0         |              |      | 40.8         |              |         |      | 26.0         | 26.0         |          | 26.0         |
| Actuated g/C Ratio                                   | 0.12         | 0.62         |              |      | 0.45         |              |         |      | 0.29         | 0.29         |          | 0.29         |
| Clearance Time (s)                                   | 4.0          | 4.0          |              |      | 4.0          |              |         |      | 4.0          | 4.0          |          | 4.0          |
| Vehicle Extension (s)                                | 3.0          | 3.0          |              |      | 3.0          |              |         |      | 3.0          | 3.0          |          | 3.0          |
| Lane Grp Cap (vph)                                   | 220          | 2200         |              |      | 1587         |              |         |      | 457          | 509          |          | 457          |
| v/s Ratio Prot                                       | c0.07        | 0.31         |              |      | c0.27        |              |         |      | 0.00         | -0.04        |          | 0.00         |
| v/s Ratio Perm<br>v/c Ratio                          | 0.54         | 0.40         |              |      | 0.50         |              |         |      | 0.00         | c0.04        |          | 0.02         |
|  | 0.56<br>37.1 | 0.49<br>9.3  |              |      | 0.59<br>18.3 |              |         |      | 0.00<br>22.8 | 0.14<br>23.7 |          | 0.07<br>23.2 |
| Uniform Delay, d1 Progression Factor                 | 1.00         | 1.00         |              |      | 0.27         |              |         |      | 1.00         | 1.00         |          | 1.00         |
| Incremental Delay, d2                                | 3.3          | 0.8          |              |      | 1.3          |              |         |      | 0.0          | 0.6          |          | 0.3          |
| Delay (s)  | 40.4         | 10.1         |              |      | 6.3          |              |         |      | 22.8         | 24.3         |          | 23.5         |
| Level of Service                                     | D            | В            |              |      | Α            |              |         |      | C            | C C          |          | 23.5<br>C    |
| Approach Delay (s)                                   |              | 13.2         |              |      | 6.3          |              |         | 22.8 | J            | J            | 23.8     | J            |
| Approach LOS   |              | В            |              |      | А            |              |         | С    |              |              | С        |              |
| •  |              |              |              |      |              |              |         |      |              |              |          |              |
| Intersection Summary                                 |              |              | 11.0         | - 11 | CN 4 2000    | l accal af ( |         |      |              |              |          |              |
| HCM 2000 Control Delay                               | oity ratio   |              | 11.3         | H    | CIVI 2000    | Level of S   | service |      | В            |              |          |              |
| HCM 2000 Volume to Capa<br>Actuated Cycle Length (s) | icity ratio  |              | 0.44<br>90.0 | C.   | ım of loct   | time (c)     |         |      | 12.0         |              |          |              |
| Intersection Capacity Utiliza                        | ation        |              | 42.9%        |      | um of lost   | of Service   |         |      |              |              |          |              |
| Analysis Period (min)                                | auUH         |              | 42.9%        | IC   | O Level (    | JI JEIVILE   |         |      | А            |              |          |              |
| Analysis Fellou (IIIII)                              |              |              | 13           |      |              |              |         |      |              |              |          |              |

| Extouring 7 tivi 1 K T II       |      |          |               |      |          |            |      |      |          |             |             |      |
|---------------------------------|------|----------|---------------|------|----------|------------|------|------|----------|-------------|-------------|------|
|                                 | ۶    | <b>→</b> | $\rightarrow$ | F    | •        | •          | •    | 4    | <b>†</b> | <i>&gt;</i> | <b>&gt;</b> | ļ    |
| Movement                        | EBL  | EBT      | EBR           | WBU  | WBL      | WBT        | WBR  | NBL  | NBT      | NBR         | SBL         | SBT  |
| Lane Configurations             |      | 414      |               |      | ă        | <b>↑</b> ↑ |      |      | 4        |             |             | 4    |
| Traffic Volume (veh/h)          | 0    | 818      | 29            | 2    | 14       | 863        | 1    | 15   | 0        | 14          | 0           | 0    |
| Future Volume (Veh/h)           | 0    | 818      | 29            | 2    | 14       | 863        | 1    | 15   | 0        | 14          | 0           | 0    |
| Sign Control                    |      | Free     |               |      |          | Free       |      |      | Stop     |             |             | Stop |
| Grade                           |      | 0%       |               |      |          | 0%         |      |      | 0%       |             |             | 0%   |
| Peak Hour Factor                | 0.70 | 0.70     | 0.70          | 0.93 | 0.93     | 0.93       | 0.93 | 0.60 | 0.60     | 0.60        | 0.92        | 0.92 |
| Hourly flow rate (vph)          | 0    | 1169     | 41            | 0    | 15       | 928        | 1    | 25   | 0        | 23          | 0           | 0    |
| Pedestrians                     |      |          |               |      |          |            |      |      | 6        |             |             | 15   |
| Lane Width (ft)                 |      |          |               |      |          |            |      |      | 12.0     |             |             | 12.0 |
| Walking Speed (ft/s)            |      |          |               |      |          |            |      |      | 3.5      |             |             | 3.5  |
| Percent Blockage                |      |          |               |      |          |            |      |      | 1        |             |             | 1    |
| Right turn flare (veh)          |      |          |               |      |          |            |      |      |          |             |             |      |
| Median type                     |      | None     |               |      |          | None       |      |      |          |             |             |      |
| Median storage veh)             |      |          |               |      |          |            |      |      |          |             |             |      |
| Upstream signal (ft)            |      | 225      |               |      |          | 339        |      |      |          |             |             |      |
| pX, platoon unblocked           | 0.83 |          |               | 0.00 | 0.83     |            |      | 0.91 | 0.91     | 0.83        | 0.91        | 0.91 |
| vC, conflicting volume          | 944  |          |               | 0    | 1216     |            |      | 1690 | 2170     | 611         | 1581        | 2190 |
| vC1, stage 1 conf vol           |      |          |               |      |          |            |      |      |          |             |             |      |
| vC2, stage 2 conf vol           |      |          |               |      |          |            |      |      |          |             |             |      |
| vCu, unblocked vol              | 514  |          |               | 0    | 852      |            |      | 726  | 1252     | 123         | 607         | 1274 |
| tC, single (s)                  | 4.1  |          |               | 0.0  | 4.1      |            |      | 7.5  | 6.5      | 6.9         | 7.5         | 6.5  |
| tC, 2 stage (s)                 |      |          |               |      |          |            |      |      |          |             |             |      |
| tF (s)                          | 2.2  |          |               | 0.0  | 2.2      |            |      | 3.5  | 4.0      | 3.3         | 3.5         | 4.0  |
| p0 queue free %                 | 100  |          |               | 0    | 98       |            |      | 91   | 100      | 97          | 100         | 100  |
| cM capacity (veh/h)             | 854  |          |               | 0    | 646      |            |      | 274  | 149      | 747         | 321         | 145  |
| Direction, Lane #               | EB 1 | EB 2     | WB 1          | WB 2 | WB 3     | NB 1       | SB 1 |      |          |             |             |      |
| Volume Total                    | 584  | 626      | 15            | 619  | 310      | 48         | 0    |      |          |             |             |      |
| Volume Left                     | 0    | 0        | 15            | 0    | 0        | 25         | 0    |      |          |             |             |      |
| Volume Right                    | 0    | 41       | 0             | 0    | 1        | 23         | 0    |      |          |             |             |      |
| cSH                             | 854  | 1700     | 646           | 1700 | 1700     | 393        | 1700 |      |          |             |             |      |
| Volume to Capacity              | 0.00 | 0.37     | 0.02          | 0.36 | 0.18     | 0.12       | 0.00 |      |          |             |             |      |
| Queue Length 95th (ft)          | 0    | 0        | 2             | 0    | 0        | 10         | 0    |      |          |             |             |      |
| Control Delay (s)               | 0.0  | 0.0      | 10.7          | 0.0  | 0.0      | 15.4       | 0.0  |      |          |             |             |      |
| Lane LOS                        |      |          | В             |      |          | С          | Α    |      |          |             |             |      |
| Approach Delay (s)              | 0.0  |          | 0.2           |      |          | 15.4       | 0.0  |      |          |             |             |      |
| Approach LOS                    |      |          |               |      |          | С          | Α    |      |          |             |             |      |
| Intersection Summary            |      |          |               |      |          |            |      |      |          |             |             |      |
| Average Delay                   |      |          | 0.4           |      |          |            |      |      |          |             |             |      |
| Intersection Capacity Utilizati | on   |          | 33.9%         | IC   | CU Level | of Service |      |      | Α        |             |             |      |
| Analysis Period (min)           |      |          | 15            |      |          |            |      |      |          |             |             |      |



| Movement               | SBR  |
|------------------------|------|
| Lan Configurations     |      |
| Traffic Volume (veh/h) | 0    |
| Future Volume (Veh/h)  | 0    |
| Sign Control           |      |
| Grade                  |      |
| Peak Hour Factor       | 0.92 |
| Hourly flow rate (vph) | 0    |
| Pedestrians            |      |
| Lane Width (ft)        |      |
| Walking Speed (ft/s)   |      |
| Percent Blockage       |      |
| Right turn flare (veh) |      |
| Median type            |      |
| Median storage veh)    |      |
| Upstream signal (ft)   |      |
| pX, platoon unblocked  | 0.83 |
| vC, conflicting volume | 480  |
| vC1, stage 1 conf vol  |      |
| vC2, stage 2 conf vol  |      |
| vCu, unblocked vol     | 0    |
| tC, single (s)         | 6.9  |
| tC, 2 stage (s)        |      |
| tF (s)                 | 3.3  |
| p0 queue free %        | 100  |
| cM capacity (veh/h)    | 884  |
| Direction, Lane #      |      |

|                                   | •         | ۶    | <b>→</b>   | •    | •          | <b>—</b>   | •       | 1    | <b>†</b> | ~    | <b>/</b> | <del> </del> |
|-----------------------------------|-----------|------|------------|------|------------|------------|---------|------|----------|------|----------|--------------|
| Movement                          | EBU       | EBL  | EBT        | EBR  | WBL        | WBT        | WBR     | NBL  | NBT      | NBR  | SBL      | SBT          |
| Lane Configurations               |           | ă    | <b>∱</b> β |      |            | <b>ተ</b> ኈ |         |      | 4        |      |          | 4            |
| Traffic Volume (vph)              | 6         | 66   | 731        | 1    | 0          | 700        | 35      | 0    | 0        | 0    | 126      | 0            |
| Future Volume (vph)               | 6         | 66   | 731        | 1    | 0          | 700        | 35      | 0    | 0        | 0    | 126      | 0            |
| Ideal Flow (vphpl)                | 1900      | 1900 | 1900       | 1900 | 1900       | 1900       | 1900    | 1900 | 1900     | 1900 | 1900     | 1900         |
| Total Lost time (s)               |           | 4.0  | 4.0        |      |            | 4.0        |         |      |          |      |          | 4.0          |
| Lane Util. Factor                 |           | 1.00 | 0.95       |      |            | 0.95       |         |      |          |      |          | 1.00         |
| Frpb, ped/bikes                   |           | 1.00 | 1.00       |      |            | 1.00       |         |      |          |      |          | 0.99         |
| Flpb, ped/bikes                   |           | 1.00 | 1.00       |      |            | 1.00       |         |      |          |      |          | 1.00         |
| Frt                               |           | 1.00 | 1.00       |      |            | 0.99       |         |      |          |      |          | 0.93         |
| Flt Protected                     |           | 0.95 | 1.00       |      |            | 1.00       |         |      |          |      |          | 0.98         |
| Satd. Flow (prot)                 |           | 1770 | 3539       |      |            | 3505       |         |      |          |      |          | 1670         |
| Flt Permitted                     |           | 0.95 | 1.00       |      |            | 1.00       |         |      |          |      |          | 0.85         |
| Satd. Flow (perm)                 |           | 1770 | 3539       |      |            | 3505       |         |      |          |      |          | 1452         |
| Peak-hour factor, PHF             | 0.68      | 0.68 | 0.68       | 0.68 | 0.91       | 0.91       | 0.91    | 0.92 | 0.92     | 0.92 | 0.74     | 0.74         |
| Adj. Flow (vph)                   | 9         | 97   | 1075       | 1    | 0          | 769        | 38      | 0    | 0        | 0    | 170      | 0            |
| RTOR Reduction (vph)              | 0         | 0    | 0          | 0    | 0          | 4          | 0       | 0    | 0        | 0    | 0        | 45           |
| Lane Group Flow (vph)             | 0         | 106  | 1076       | 0    | 0          | 803        | 0       | 0    | 0        | 0    | 0        | 316          |
| Confl. Peds. (#/hr)               |           |      |            | 7    |            |            | 13      | 11   |          |      |          |              |
| Confl. Bikes (#/hr)               |           |      |            | 1    |            |            | 1       |      |          |      |          |              |
| Turn Type                         | Prot      | Prot | NA         |      |            | NA         |         |      |          |      | Perm     | NA           |
| Protected Phases                  | 7         | 7    | 4          |      |            | 8          |         |      | 2        |      |          | 6            |
| Permitted Phases                  |           |      |            |      |            |            |         | 2    |          |      | 6        |              |
| Actuated Green, G (s)             |           | 9.6  | 49.0       |      |            | 35.4       |         |      |          |      |          | 33.0         |
| Effective Green, g (s)            |           | 9.6  | 49.0       |      |            | 35.4       |         |      |          |      |          | 33.0         |
| Actuated g/C Ratio                |           | 0.11 | 0.54       |      |            | 0.39       |         |      |          |      |          | 0.37         |
| Clearance Time (s)                |           | 4.0  | 4.0        |      |            | 4.0        |         |      |          |      |          | 4.0          |
| Vehicle Extension (s)             |           | 3.0  | 3.0        |      |            | 3.0        |         |      |          |      |          | 3.0          |
| Lane Grp Cap (vph)                |           | 188  | 1926       |      |            | 1378       |         |      |          |      |          | 532          |
| v/s Ratio Prot                    |           | 0.06 | c0.30      |      |            | c0.23      |         |      |          |      |          |              |
| v/s Ratio Perm                    |           |      |            |      |            |            |         |      |          |      |          | c0.22        |
| v/c Ratio                         |           | 0.56 | 0.56       |      |            | 0.58       |         |      |          |      |          | 0.59         |
| Uniform Delay, d1                 |           | 38.2 | 13.4       |      |            | 21.5       |         |      |          |      |          | 23.1         |
| Progression Factor                |           | 0.82 | 0.49       |      |            | 1.00       |         |      |          |      |          | 1.00         |
| Incremental Delay, d2             |           | 3.5  | 1.1        |      |            | 1.8        |         |      |          |      |          | 1.8          |
| Delay (s)                         |           | 34.7 | 7.7        |      |            | 23.3       |         |      |          |      |          | 24.9         |
| Level of Service                  |           | С    | Α          |      |            | С          |         |      |          |      |          | С            |
| Approach Delay (s)                |           |      | 10.1       |      |            | 23.3       |         |      | 0.0      |      |          | 24.9         |
| Approach LOS                      |           |      | В          |      |            | С          |         |      | А        |      |          | С            |
| Intersection Summary              |           |      |            |      |            |            |         |      |          |      |          |              |
| HCM 2000 Control Delay            |           |      | 16.9       | H    | CM 2000    | Level of S | Service |      | В        |      |          |              |
| HCM 2000 Volume to Capaci         | ity ratio |      | 0.60       |      |            |            |         |      |          |      |          |              |
| Actuated Cycle Length (s)         |           |      | 90.0       |      | um of lost |            |         |      | 12.0     |      |          |              |
| Intersection Capacity Utilization | on        |      | 53.1%      | IC   | U Level o  | of Service |         |      | Α        |      |          |              |
| Analysis Period (min)             |           |      | 15         |      |            |            |         |      |          |      |          |              |



| Movement  Lane Configurations  Traffic Volume (vph)  Future Volume (vph)  Ideal Flow (vphpl)  Total Lost time (s)  Lane Util. Factor | SBR<br>141<br>141<br>1900 |
|--|---------------------------|
| Traffic Volume (vph) Future Volume (vph) Ideal Flow (vphpl) Total Lost time (s)  | 141                       |
| Future Volume (vph) Ideal Flow (vphpl) Total Lost time (s)   | 141                       |
| Ideal Flow (vphpl) Total Lost time (s)   |                           |
| Total Lost time (s)  | 1000                      |
|  | 1700                      |
| Lane Util. Factor  |                           |
|  |                           |
| Frpb, ped/bikes  |                           |
| Flpb, ped/bikes  |                           |
| Frt  |                           |
| Flt Protected  |                           |
| Satd. Flow (prot)  |                           |
| Flt Permitted  |                           |
| Satd. Flow (perm)  |                           |
| Peak-hour factor, PHF  | 0.74                      |
| Adj. Flow (vph)  | 191                       |
| RTOR Reduction (vph)   | 0                         |
| Lane Group Flow (vph)  | 0                         |
| Confl. Peds. (#/hr)  | 11                        |
| Confl. Bikes (#/hr)  |                           |
| Turn Type  |                           |
| Protected Phases   |                           |
| Permitted Phases   |                           |
| Actuated Green, G (s)  |                           |
| Effective Green, g (s)   |                           |
| Actuated g/C Ratio   |                           |
| Clearance Time (s)   |                           |
| Vehicle Extension (s)  |                           |
| Lane Grp Cap (vph)   |                           |
| v/s Ratio Prot   |                           |
| v/s Ratio Perm   |                           |
| v/c Ratio  |                           |
| Uniform Delay, d1  |                           |
| Progression Factor   |                           |
| Incremental Delay, d2  |                           |
| Delay (s)  |                           |
| Level of Service   |                           |
| Approach Delay (s)   |                           |
| Approach LOS   |                           |
| • •  |                           |
| Intersection Summary   |                           |

|                              | ۶     | <b>→</b> | •     | •    | <b>←</b>  | 4          | 1    | <b>†</b> | <i>&gt;</i> | <b>/</b> | <del> </del> | √    |
|------------------------------|-------|----------|-------|------|-----------|------------|------|----------|-------------|----------|--------------|------|
| Movement                     | EBL   | EBT      | EBR   | WBL  | WBT       | WBR        | NBL  | NBT      | NBR         | SBL      | SBT          | SBR  |
| Lane Configurations          |       | 4        |       |      | 44        |            |      | 4        |             |          | 4            |      |
| Traffic Volume (veh/h)       | 0     | 0        | 0     | 1    | 0         | 12         | 0    | 29       | 0           | 4        | 43           | 0    |
| Future Volume (Veh/h)        | 0     | 0        | 0     | 1    | 0         | 12         | 0    | 29       | 0           | 4        | 43           | 0    |
| Sign Control                 |       | Stop     |       |      | Stop      |            |      | Free     |             |          | Free         |      |
| Grade                        |       | 0%       |       |      | 0%        |            |      | 0%       |             |          | 0%           |      |
| Peak Hour Factor             | 0.60  | 0.60     | 0.60  | 0.60 | 0.60      | 0.60       | 0.60 | 0.60     | 0.60        | 0.60     | 0.60         | 0.60 |
| Hourly flow rate (vph)       | 0     | 0        | 0     | 2    | 0         | 20         | 0    | 48       | 0           | 7        | 72           | 0    |
| Pedestrians                  |       |          |       |      |           |            |      |          |             |          |              |      |
| Lane Width (ft)              |       |          |       |      |           |            |      |          |             |          |              |      |
| Walking Speed (ft/s)         |       |          |       |      |           |            |      |          |             |          |              |      |
| Percent Blockage             |       |          |       |      |           |            |      |          |             |          |              |      |
| Right turn flare (veh)       |       |          |       |      |           |            |      |          |             |          |              |      |
| Median type                  |       |          |       |      |           |            |      | None     |             |          | None         |      |
| Median storage veh)          |       |          |       |      |           |            |      |          |             |          |              |      |
| Upstream signal (ft)         |       |          |       |      |           |            |      |          |             |          |              |      |
| pX, platoon unblocked        |       |          |       |      |           |            |      |          |             |          |              |      |
| vC, conflicting volume       | 154   | 134      | 72    | 134  | 134       | 48         | 72   |          |             | 48       |              |      |
| vC1, stage 1 conf vol        |       |          |       |      |           |            |      |          |             |          |              |      |
| vC2, stage 2 conf vol        |       |          |       |      |           |            |      |          |             |          |              |      |
| vCu, unblocked vol           | 154   | 134      | 72    | 134  | 134       | 48         | 72   |          |             | 48       |              |      |
| tC, single (s)               | 7.1   | 6.5      | 6.2   | 7.1  | 6.5       | 6.2        | 4.1  |          |             | 4.1      |              |      |
| tC, 2 stage (s)              |       |          |       |      |           |            |      |          |             |          |              |      |
| tF (s)                       | 3.5   | 4.0      | 3.3   | 3.5  | 4.0       | 3.3        | 2.2  |          |             | 2.2      |              |      |
| p0 queue free %              | 100   | 100      | 100   | 100  | 100       | 98         | 100  |          |             | 100      |              |      |
| cM capacity (veh/h)          | 794   | 753      | 990   | 835  | 753       | 1021       | 1528 |          |             | 1559     |              |      |
| Direction, Lane #            | EB 1  | WB 1     | NB 1  | SB 1 |           |            |      |          |             |          |              |      |
| Volume Total                 | 0     | 22       | 48    | 79   |           |            |      |          |             |          |              |      |
| Volume Left                  | 0     | 2        | 0     | 7    |           |            |      |          |             |          |              |      |
| Volume Right                 | 0     | 20       | 0     | 0    |           |            |      |          |             |          |              |      |
| cSH                          | 1700  | 1001     | 1528  | 1559 |           |            |      |          |             |          |              |      |
| Volume to Capacity           | 0.02  | 0.02     | 0.00  | 0.00 |           |            |      |          |             |          |              |      |
| Queue Length 95th (ft)       | 0.02  | 2        | 0.00  | 0.00 |           |            |      |          |             |          |              |      |
| •                            | 0.0   | 8.7      | 0.0   | 0.7  |           |            |      |          |             |          |              |      |
| Control Delay (s) Lane LOS   | Α     | Α.       | 0.0   | Α    |           |            |      |          |             |          |              |      |
| Approach Delay (s)           | 0.0   | 8.7      | 0.0   | 0.7  |           |            |      |          |             |          |              |      |
| Approach LOS                 | Α     | Α.       | 0.0   | 0.7  |           |            |      |          |             |          |              |      |
|                              | , ,   |          |       |      |           |            |      |          |             |          |              |      |
| Intersection Summary         |       |          | 1 /   |      |           |            |      |          |             |          |              |      |
| Average Delay                | otion |          | 1.6   | 10   | المديمالا | of Comile  |      |          | Λ           |          |              |      |
| Intersection Capacity Utiliz | .auon |          | 15.6% | IC   | U Level ( | of Service |      |          | Α           |          |              |      |
| Analysis Period (min)        |       |          | 15    |      |           |            |      |          |             |          |              |      |

|                                 | ۶            | <b>→</b>     | •        | •    | <b>←</b>     | 4          | 4       | †    | ~            | <b>/</b>     | Ţ    | ✓            |
|---------------------------------|--------------|--------------|----------|------|--------------|------------|---------|------|--------------|--------------|------|--------------|
| Movement                        | EBL          | EBT          | EBR      | WBL  | WBT          | WBR        | NBL     | NBT  | NBR          | SBL          | SBT  | SBR          |
| Lane Configurations             | ሻ            | <b>∱</b> ∱   |          |      | ተኈ           |            |         |      | 7            | ሻ            |      | 7            |
| Traffic Volume (vph)            | 149          | 1353         | 0        | 0    | 710          | 60         | 0       | 0    | 6            | 51           | 0    | 43           |
| Future Volume (vph)             | 149          | 1353         | 0        | 0    | 710          | 60         | 0       | 0    | 6            | 51           | 0    | 43           |
| Ideal Flow (vphpl)              | 1900         | 1900         | 1900     | 1900 | 1900         | 1900       | 1900    | 1900 | 1900         | 1900         | 1900 | 1900         |
| Total Lost time (s)             | 4.0          | 4.0          |          |      | 4.0          |            |         |      | 4.0          | 4.0          |      | 4.0          |
| Lane Util. Factor               | 1.00         | 0.95         |          |      | 0.95         |            |         |      | 1.00         | 1.00         |      | 1.00         |
| Frpb, ped/bikes                 | 1.00         | 1.00         |          |      | 0.99         |            |         |      | 0.98         | 1.00         |      | 1.00         |
| Flpb, ped/bikes                 | 1.00         | 1.00         |          |      | 1.00         |            |         |      | 1.00         | 0.99         |      | 1.00         |
| Frt<br>Elt Drotostad            | 1.00         | 1.00<br>1.00 |          |      | 0.99<br>1.00 |            |         |      | 0.86<br>1.00 | 1.00<br>0.95 |      | 0.85         |
| Flt Protected Satd. Flow (prot) | 0.95<br>1770 | 3539         |          |      | 3474         |            |         |      | 1584         | 1761         |      | 1.00<br>1583 |
| Flt Permitted                   | 0.95         | 1.00         |          |      | 1.00         |            |         |      | 1.00         | 0.95         |      | 1.00         |
| Satd. Flow (perm)               | 1770         | 3539         |          |      | 3474         |            |         |      | 1584         | 1761         |      | 1583         |
| Peak-hour factor, PHF           | 0.72         | 0.72         | 0.72     | 0.91 | 0.91         | 0.94       | 0.50    | 0.50 | 0.50         | 0.78         | 0.78 | 0.78         |
| Adj. Flow (vph)                 | 207          | 1879         | 0.72     | 0.91 | 780          | 64         | 0.50    | 0.50 | 12           | 65           | 0.78 | 55           |
| RTOR Reduction (vph)            | 0            | 0            | 0        | 0    | 5            | 04         | 0       | 0    | 9            | 0            | 0    | 42           |
| Lane Group Flow (vph)           | 207          | 1879         | 0        | 0    | 839          | 0          | 0       | 0    | 3            | 65           | 0    | 13           |
| Confl. Peds. (#/hr)             | 201          | 1077         | 21       | U    | 037          | 24         | U       | U    | 4            | 4            | U    | 13           |
| Confl. Bikes (#/hr)             |              |              | 1        |      |              | 3          |         |      | 7            | -            |      |              |
| Turn Type                       | Prot         | NA           | <u> </u> |      | NA           |            |         |      | Perm         | Perm         |      | Perm         |
| Protected Phases                | 7            | 4            |          |      | 8            |            |         |      | 1 01111      | 1 01111      |      | 1 OIIII      |
| Permitted Phases                | ,            | •            |          |      |              |            |         |      | 2            | 6            |      | 6            |
| Actuated Green, G (s)           | 17.3         | 76.0         |          |      | 54.7         |            |         |      | 26.0         | 26.0         |      | 26.0         |
| Effective Green, g (s)          | 17.3         | 76.0         |          |      | 54.7         |            |         |      | 26.0         | 26.0         |      | 26.0         |
| Actuated g/C Ratio              | 0.16         | 0.69         |          |      | 0.50         |            |         |      | 0.24         | 0.24         |      | 0.24         |
| Clearance Time (s)              | 4.0          | 4.0          |          |      | 4.0          |            |         |      | 4.0          | 4.0          |      | 4.0          |
| Vehicle Extension (s)           | 3.0          | 3.0          |          |      | 3.0          |            |         |      | 3.0          | 3.0          |      | 3.0          |
| Lane Grp Cap (vph)              | 278          | 2445         |          |      | 1727         |            |         |      | 374          | 416          |      | 374          |
| v/s Ratio Prot                  | 0.12         | c0.53        |          |      | 0.24         |            |         |      |              |              |      |              |
| v/s Ratio Perm                  |              |              |          |      |              |            |         |      | 0.00         | c0.04        |      | 0.01         |
| v/c Ratio                       | 0.74         | 0.77         |          |      | 0.49         |            |         |      | 0.01         | 0.16         |      | 0.03         |
| Uniform Delay, d1               | 44.2         | 11.2         |          |      | 18.3         |            |         |      | 32.1         | 33.3         |      | 32.3         |
| Progression Factor              | 1.00         | 1.00         |          |      | 0.29         |            |         |      | 1.00         | 1.00         |      | 1.00         |
| Incremental Delay, d2           | 10.3         | 2.4          |          |      | 0.9          |            |         |      | 0.0          | 8.0          |      | 0.2          |
| Delay (s)                       | 54.6         | 13.6         |          |      | 6.2          |            |         |      | 32.2         | 34.1         |      | 32.5         |
| Level of Service                | D            | В            |          |      | Α            |            |         |      | С            | С            |      | С            |
| Approach Delay (s)              |              | 17.7         |          |      | 6.2          |            |         | 32.2 |              |              | 33.4 |              |
| Approach LOS                    |              | В            |          |      | А            |            |         | С    |              |              | С    |              |
| Intersection Summary            |              |              |          |      |              |            |         |      |              |              |      |              |
| HCM 2000 Control Delay          |              |              | 15.2     | H    | CM 2000      | Level of S | Service |      | В            |              |      |              |
| HCM 2000 Volume to Capac        | city ratio   |              | 0.64     |      |              |            |         |      |              |              |      |              |
| Actuated Cycle Length (s)       |              |              | 110.0    |      | um of lost   |            |         |      | 12.0         |              |      |              |
| Intersection Capacity Utiliza   | tion         |              | 54.9%    | IC   | U Level o    | of Service |         |      | Α            |              |      |              |
| Analysis Period (min)           |              |              | 15       |      |              |            |         |      |              |              |      |              |

|                              | ۶     | <b>→</b> | •     | F    | •         | <b>←</b>   | •    | 4    | <b>†</b> | <i>&gt;</i> | <b>/</b> | <del> </del> |
|------------------------------|-------|----------|-------|------|-----------|------------|------|------|----------|-------------|----------|--------------|
| Movement                     | EBL   | EBT      | EBR   | WBU  | WBL       | WBT        | WBR  | NBL  | NBT      | NBR         | SBL      | SBT          |
| Lane Configurations          |       | 4î>      |       |      | Ä         | <b>∱</b> } |      |      | 4        |             |          | 4            |
| Traffic Volume (veh/h)       | 0     | 1310     | 89    | 4    | 25        | 746        | 1    | 7    | 0        | 21          | 0        | 0            |
| Future Volume (Veh/h)        | 0     | 1310     | 89    | 4    | 25        | 746        | 1    | 7    | 0        | 21          | 0        | 0            |
| Sign Control                 |       | Free     |       |      |           | Free       |      |      | Stop     |             |          | Stop         |
| Grade                        |       | 0%       |       |      |           | 0%         |      |      | 0%       |             |          | 0%           |
| Peak Hour Factor             | 0.70  | 0.70     | 0.70  | 0.93 | 0.93      | 0.93       | 0.93 | 0.60 | 0.60     | 0.60        | 0.92     | 0.92         |
| Hourly flow rate (vph)       | 0     | 1871     | 127   | 0    | 27        | 802        | 1    | 12   | 0        | 35          | 0        | 0            |
| Pedestrians                  |       |          |       |      |           |            |      |      | 24       |             |          | 26           |
| Lane Width (ft)              |       |          |       |      |           |            |      |      | 12.0     |             |          | 12.0         |
| Walking Speed (ft/s)         |       |          |       |      |           |            |      |      | 3.5      |             |          | 3.5          |
| Percent Blockage             |       |          |       |      |           |            |      |      | 2        |             |          | 2            |
| Right turn flare (veh)       |       |          |       |      |           |            |      |      |          |             |          |              |
| Median type                  |       | None     |       |      |           | None       |      |      |          |             |          |              |
| Median storage veh)          |       |          |       |      |           |            |      |      |          |             |          |              |
| Upstream signal (ft)         |       | 225      |       |      |           | 339        |      |      |          |             |          |              |
| pX, platoon unblocked        | 0.86  |          |       | 0.00 | 0.62      |            |      | 0.69 | 0.69     | 0.62        | 0.69     | 0.69         |
| vC, conflicting volume       | 829   |          |       | 0    | 2022      |            |      | 2414 | 2842     | 1023        | 1853     | 2904         |
| vC1, stage 1 conf vol        |       |          |       |      |           |            |      |      |          |             |          |              |
| vC2, stage 2 conf vol        |       |          |       |      |           |            |      |      |          |             |          |              |
| vCu, unblocked vol           | 470   |          |       | 0    | 1426      |            |      | 1232 | 1849     | 0           | 421      | 1940         |
| tC, single (s)               | 4.1   |          |       | 0.0  | 4.1       |            |      | 7.5  | 6.5      | 6.9         | 7.5      | 6.5          |
| tC, 2 stage (s)              |       |          |       |      |           |            |      |      |          |             |          |              |
| tF (s)                       | 2.2   |          |       | 0.0  | 2.2       |            |      | 3.5  | 4.0      | 3.3         | 3.5      | 4.0          |
| p0 queue free %              | 100   |          |       | 0    | 91        |            |      | 85   | 100      | 95          | 100      | 100          |
| cM capacity (veh/h)          | 911   |          |       | 0    | 287       |            |      | 81   | 44       | 658         | 296      | 39           |
| Direction, Lane #            | EB 1  | EB 2     | WB 1  | WB 2 | WB 3      | NB 1       | SB 1 |      |          |             |          |              |
| Volume Total                 | 936   | 1062     | 27    | 535  | 268       | 47         | 1    |      |          |             |          |              |
| Volume Left                  | 0     | 0        | 27    | 0    | 0         | 12         | 0    |      |          |             |          |              |
| Volume Right                 | 0     | 127      | 0     | 0    | 1         | 35         | 1    |      |          |             |          |              |
| cSH                          | 911   | 1700     | 287   | 1700 | 1700      | 233        | 905  |      |          |             |          |              |
| Volume to Capacity           | 0.00  | 0.63     | 0.09  | 0.31 | 0.16      | 0.20       | 0.00 |      |          |             |          |              |
| Queue Length 95th (ft)       | 0     | 0        | 8     | 0    | 0         | 18         | 0    |      |          |             |          |              |
| Control Delay (s)            | 0.0   | 0.0      | 18.8  | 0.0  | 0.0       | 24.3       | 9.0  |      |          |             |          |              |
| Lane LOS                     | 0.0   | 0.0      | С     | 0.0  | 0.0       | С          | A    |      |          |             |          |              |
| Approach Delay (s)           | 0.0   |          | 0.6   |      |           | 24.3       | 9.0  |      |          |             |          |              |
| Approach LOS                 | 0.0   |          | 0.0   |      |           | C          | A    |      |          |             |          |              |
| Intersection Summary         |       |          |       |      |           |            |      |      |          |             |          |              |
| Average Delay                |       |          | 0.6   |      |           |            |      |      |          |             |          |              |
| Intersection Capacity Utiliz | ation |          | 54.0% | IC   | CU Level  | of Service |      |      | Α        |             |          |              |
| Analysis Period (min)        |       |          | 15    | 10   | . 5 25001 |            |      |      | ,,       |             |          |              |
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| Movement               | SBR  |
|------------------------|------|
| Lan Configurations     |      |
| Traffic Volume (veh/h) | 1    |
| Future Volume (Veh/h)  | 1    |
| Sign Control           |      |
| Grade                  |      |
| Peak Hour Factor       | 0.92 |
| Hourly flow rate (vph) | 1    |
| Pedestrians            |      |
| Lane Width (ft)        |      |
| Walking Speed (ft/s)   |      |
| Percent Blockage       |      |
| Right turn flare (veh) |      |
| Median type            |      |
| Median storage veh)    |      |
| Upstream signal (ft)   |      |
| pX, platoon unblocked  | 0.86 |
| vC, conflicting volume | 428  |
| vC1, stage 1 conf vol  |      |
| vC2, stage 2 conf vol  |      |
| vCu, unblocked vol     | 2    |
| tC, single (s)         | 6.9  |
| tC, 2 stage (s)        |      |
| tF (s)                 | 3.3  |
| p0 queue free %        | 100  |
| cM capacity (veh/h)    | 905  |
| Direction, Lane #      |      |

|                                   | <b></b>  | ۶    | <b>→</b>   | •    | •          | <b>←</b>   | 4       | 1    | <b>†</b> | ~    | <b>/</b> | <del> </del> |
|-----------------------------------|----------|------|------------|------|------------|------------|---------|------|----------|------|----------|--------------|
| Movement                          | EBU      | EBL  | EBT        | EBR  | WBL        | WBT        | WBR     | NBL  | NBT      | NBR  | SBL      | SBT          |
| Lane Configurations               |          | ă    | <b>∱</b> ∱ |      |            | <b>ተ</b> ኈ |         |      | 4        |      |          | 4            |
| Traffic Volume (vph)              | 6        | 93   | 1218       | 9    | 0          | 684        | 48      | 2    | 1        | 1    | 57       | 2            |
| Future Volume (vph)               | 6        | 93   | 1218       | 9    | 0          | 684        | 48      | 2    | 1        | 1    | 57       | 2            |
| Ideal Flow (vphpl)                | 1900     | 1900 | 1900       | 1900 | 1900       | 1900       | 1900    | 1900 | 1900     | 1900 | 1900     | 1900         |
| Total Lost time (s)               |          | 4.0  | 4.0        |      |            | 4.0        |         |      | 4.0      |      |          | 4.0          |
| Lane Util. Factor                 |          | 1.00 | 0.95       |      |            | 0.95       |         |      | 1.00     |      |          | 1.00         |
| Frpb, ped/bikes                   |          | 1.00 | 1.00       |      |            | 0.99       |         |      | 1.00     |      |          | 0.99         |
| Flpb, ped/bikes                   |          | 1.00 | 1.00       |      |            | 1.00       |         |      | 1.00     |      |          | 1.00         |
| Frt                               |          | 1.00 | 1.00       |      |            | 0.99       |         |      | 0.97     |      |          | 0.93         |
| Flt Protected                     |          | 0.95 | 1.00       |      |            | 1.00       |         |      | 0.98     |      |          | 0.98         |
| Satd. Flow (prot)                 |          | 1770 | 3534       |      |            | 3484       |         |      | 1748     |      |          | 1663         |
| Flt Permitted                     |          | 0.95 | 1.00       |      |            | 1.00       |         |      | 0.93     |      |          | 0.87         |
| Satd. Flow (perm)                 |          | 1770 | 3534       |      |            | 3484       |         |      | 1667     |      |          | 1480         |
| Peak-hour factor, PHF             | 0.68     | 0.68 | 0.68       | 0.68 | 0.91       | 0.91       | 0.91    | 0.92 | 0.92     | 0.92 | 0.74     | 0.74         |
| Adj. Flow (vph)                   | 9        | 137  | 1791       | 13   | 0          | 752        | 53      | 2    | 1        | 1    | 77       | 3            |
| RTOR Reduction (vph)              | 0        | 0    | 0          | 0    | 0          | 5          | 0       | 0    | 1        | 0    | 0        | 40           |
| Lane Group Flow (vph)             | 0        | 146  | 1804       | 0    | 0          | 800        | 0       | 0    | 3        | 0    | 0        | 139          |
| Confl. Peds. (#/hr)               |          |      |            | 30   |            |            | 22      | 12   |          |      |          |              |
| Confl. Bikes (#/hr)               |          |      |            | 3    |            |            | 3       |      |          |      |          |              |
| Turn Type                         | Prot     | Prot | NA         |      |            | NA         |         | Perm | NA       |      | Perm     | NA           |
| Protected Phases                  | 7        | 7    | 4          |      |            | 8          |         |      | 2        |      |          | 6            |
| Permitted Phases                  |          | 4.0  | 7.4.0      |      |            | <b>540</b> |         | 2    |          |      | 6        | 00.0         |
| Actuated Green, G (s)             |          | 16.0 | 74.0       |      |            | 54.0       |         |      | 28.0     |      |          | 28.0         |
| Effective Green, g (s)            |          | 16.0 | 74.0       |      |            | 54.0       |         |      | 28.0     |      |          | 28.0         |
| Actuated g/C Ratio                |          | 0.15 | 0.67       |      |            | 0.49       |         |      | 0.25     |      |          | 0.25         |
| Clearance Time (s)                |          | 4.0  | 4.0        |      |            | 4.0        |         |      | 4.0      |      |          | 4.0          |
| Vehicle Extension (s)             |          | 3.0  | 3.0        |      |            | 3.0        |         |      | 3.0      |      |          | 3.0          |
| Lane Grp Cap (vph)                |          | 257  | 2377       |      |            | 1710       |         |      | 424      |      |          | 376          |
| v/s Ratio Prot                    |          | 0.08 | c0.51      |      |            | 0.23       |         |      | 0.00     |      |          | 0.00         |
| v/s Ratio Perm                    |          | 0.53 | 0.77       |      |            | 0.47       |         |      | 0.00     |      |          | c0.09        |
| v/c Ratio                         |          | 0.57 | 0.76       |      |            | 0.47       |         |      | 0.01     |      |          | 0.37         |
| Uniform Delay, d1                 |          | 43.8 | 12.0       |      |            | 18.5       |         |      | 30.6     |      |          | 33.7         |
| Progression Factor                |          | 0.79 | 0.26       |      |            | 1.00       |         |      | 1.00     |      |          | 1.00         |
| Incremental Delay, d2             |          | 2.0  | 1.7        |      |            | 0.9        |         |      | 0.0      |      |          | 0.6          |
| Delay (s)                         |          | 36.6 | 4.8        |      |            | 19.4       |         |      | 30.7     |      |          | 34.3         |
| Level of Service                  |          | D    | A          |      |            | B          |         |      | C        |      |          | C            |
| Approach Delay (s)                |          |      | 7.2        |      |            | 19.4       |         |      | 30.7     |      |          | 34.3         |
| Approach LOS                      |          |      | А          |      |            | В          |         |      | С        |      |          | С            |
| Intersection Summary              |          |      |            |      |            |            |         |      |          |      |          |              |
| HCM 2000 Control Delay            |          |      | 12.2       | H    | CM 2000    | Level of S | Service |      | В        |      |          |              |
| HCM 2000 Volume to Capaci         | ty ratio |      | 0.68       |      |            |            |         |      |          |      |          |              |
| Actuated Cycle Length (s)         |          |      | 110.0      |      | um of lost |            |         |      | 12.0     |      |          |              |
| Intersection Capacity Utilization | on       |      | 55.0%      | IC   | U Level o  | of Service |         |      | Α        |      |          |              |
| Analysis Period (min)             |          |      | 15         |      |            |            |         |      |          |      |          |              |



|                        | •    |
|------------------------|------|
| Movement               | SBR  |
| LaneConfigurations     |      |
| Traffic Volume (vph)   | 73   |
| Future Volume (vph)    | 73   |
| Ideal Flow (vphpl)     | 1900 |
| Total Lost time (s)    |      |
| Lane Util. Factor      |      |
| Frpb, ped/bikes        |      |
| Flpb, ped/bikes        |      |
| Frt                    |      |
| Flt Protected          |      |
| Satd. Flow (prot)      |      |
| Flt Permitted          |      |
| Satd. Flow (perm)      |      |
| Peak-hour factor, PHF  | 0.74 |
| Adj. Flow (vph)        | 99   |
| RTOR Reduction (vph)   | 0    |
| Lane Group Flow (vph)  | 0    |
| Confl. Peds. (#/hr)    | 12   |
| Confl. Bikes (#/hr)    | 12   |
| Turn Type              |      |
| Protected Phases       |      |
| Permitted Phases       |      |
| Actuated Green, G (s)  |      |
| Effective Green, g (s) |      |
| Actuated g/C Ratio     |      |
| Clearance Time (s)     |      |
| Vehicle Extension (s)  |      |
|                        |      |
| Lane Grp Cap (vph)     |      |
| v/s Ratio Prot         |      |
| v/s Ratio Perm         |      |
| v/c Ratio              |      |
| Uniform Delay, d1      |      |
| Progression Factor     |      |
| Incremental Delay, d2  |      |
| Delay (s)              |      |
| Level of Service       |      |
| Approach Delay (s)     |      |
| Approach LOS           |      |
| Intersection Summary   |      |
| intersection summary   |      |

|                                   | ۶    | <b>→</b> | •    | •          | <b>←</b>    | 4    | 1    | <b>†</b> | <i>&gt;</i> | <b>\</b> | <b>↓</b> | 4    |
|-----------------------------------|------|----------|------|------------|-------------|------|------|----------|-------------|----------|----------|------|
| Movement                          | EBL  | EBT      | EBR  | WBL        | WBT         | WBR  | NBL  | NBT      | NBR         | SBL      | SBT      | SBR  |
| Lane Configurations               |      | 4        |      |            | 4           |      |      | 4        |             |          | 4        |      |
| Traffic Volume (veh/h)            | 0    | 0        | 0    | 0          | 0           | 5    | 0    | 28       | 1           | 7        | 114      | 0    |
| Future Volume (Veh/h)             | 0    | 0        | 0    | 0          | 0           | 5    | 0    | 28       | 1           | 7        | 114      | 0    |
| Sign Control                      |      | Stop     |      |            | Stop        |      |      | Free     |             |          | Free     |      |
| Grade                             |      | 0%       |      |            | 0%          |      |      | 0%       |             |          | 0%       |      |
| Peak Hour Factor                  | 0.60 | 0.60     | 0.60 | 0.60       | 0.60        | 0.60 | 0.60 | 0.60     | 0.60        | 0.60     | 0.60     | 0.60 |
| Hourly flow rate (vph)            | 0    | 0        | 0    | 0          | 0           | 8    | 0    | 47       | 2           | 12       | 190      | 0    |
| Pedestrians                       |      |          |      |            |             |      |      |          |             |          | 4        |      |
| Lane Width (ft)                   |      |          |      |            |             |      |      |          |             |          | 12.0     |      |
| Walking Speed (ft/s)              |      |          |      |            |             |      |      |          |             |          | 3.5      |      |
| Percent Blockage                  |      |          |      |            |             |      |      |          |             |          | 0        |      |
| Right turn flare (veh)            |      |          |      |            |             |      |      |          |             |          |          |      |
| Median type                       |      |          |      |            |             |      |      | None     |             |          | None     |      |
| Median storage veh)               |      |          |      |            |             |      |      |          |             |          |          |      |
| Upstream signal (ft)              |      |          |      |            |             |      |      |          |             |          |          |      |
| pX, platoon unblocked             |      |          |      |            |             |      |      |          |             |          |          |      |
| vC, conflicting volume            | 274  | 263      | 190  | 262        | 262         | 52   | 190  |          |             | 49       |          |      |
| vC1, stage 1 conf vol             |      |          |      |            |             |      |      |          |             |          |          |      |
| vC2, stage 2 conf vol             |      |          |      |            |             |      |      |          |             |          |          |      |
| vCu, unblocked vol                | 274  | 263      | 190  | 262        | 262         | 52   | 190  |          |             | 49       |          |      |
| tC, single (s)                    | 7.1  | 6.5      | 6.2  | 7.1        | 6.5         | 6.2  | 4.1  |          |             | 4.1      |          |      |
| tC, 2 stage (s)                   |      |          |      |            |             |      |      |          |             |          |          |      |
| tF (s)                            | 3.5  | 4.0      | 3.3  | 3.5        | 4.0         | 3.3  | 2.2  |          |             | 2.2      |          |      |
| p0 queue free %                   | 100  | 100      | 100  | 100        | 100         | 99   | 100  |          |             | 99       |          |      |
| cM capacity (veh/h)               | 667  | 637      | 852  | 687        | 638         | 1012 | 1384 |          |             | 1558     |          |      |
| Direction, Lane #                 | EB 1 | WB 1     | NB 1 | SB 1       |             |      |      |          |             |          |          |      |
| Volume Total                      | 0    | 8        | 49   | 202        |             |      |      |          |             |          |          |      |
| Volume Left                       | 0    | 0        | 0    | 12         |             |      |      |          |             |          |          |      |
| Volume Right                      | 0    | 8        | 2    | 0          |             |      |      |          |             |          |          |      |
| cSH                               | 1700 | 1012     | 1384 | 1558       |             |      |      |          |             |          |          |      |
| Volume to Capacity                | 0.01 | 0.01     | 0.00 | 0.01       |             |      |      |          |             |          |          |      |
| Queue Length 95th (ft)            | 0.01 | 1        | 0    | 1          |             |      |      |          |             |          |          |      |
| Control Delay (s)                 | 0.0  | 8.6      | 0.0  | 0.5        |             |      |      |          |             |          |          |      |
| Lane LOS                          | A    | A        | 0.0  | A          |             |      |      |          |             |          |          |      |
| Approach Delay (s)                | 0.0  | 8.6      | 0.0  | 0.5        |             |      |      |          |             |          |          |      |
| Approach LOS                      | A    | A        | 0.0  | 0.0        |             |      |      |          |             |          |          |      |
| Intersection Summary              |      |          |      |            |             |      |      |          |             |          |          |      |
| Average Delay                     |      | 0.7      |      |            |             |      |      |          |             |          |          |      |
| Intersection Capacity Utilization |      | 23.0%    | IC   | III evel d | of Service  |      |      | А        |             |          |          |      |
| Analysis Period (min)             |      | 15       | 10   | O LOVOI (  | JI JOI VICE |      |      | Λ        |             |          |          |      |
| Analysis i criou (IIIII)          |      |          | 13   |            |             |      |      |          |             |          |          |      |

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|                               | ۶            | <b>→</b>     | •     | •    | <b>←</b>     | •          | 1        | <b>†</b> | ~            | <b>/</b>     | Ţ         | 4            |
|-------------------------------|--------------|--------------|-------|------|--------------|------------|----------|----------|--------------|--------------|-----------|--------------|
| Movement                      | EBL          | EBT          | EBR   | WBL  | WBT          | WBR        | NBL      | NBT      | NBR          | SBL          | SBT       | SBR          |
| Lane Configurations           | Ť            | <b>∱</b> ∱   |       |      | <b>∱</b> ∱   |            |          |          | 7            | ሻ            |           | 7            |
| Traffic Volume (vph)          | 89           | 778          | 2     | 0    | 807          | 45         | 0        | 0        | 2            | 57           | 0         | 87           |
| Future Volume (vph)           | 89           | 779          | 2     | 0    | 813          | 45         | 0        | 0        | 2            | 57           | 0         | 87           |
| Ideal Flow (vphpl)            | 1900         | 1900         | 1900  | 1900 | 1900         | 1900       | 1900     | 1900     | 1900         | 1900         | 1900      | 1900         |
| Total Lost time (s)           | 4.0          | 4.0          |       |      | 4.0          |            |          |          | 4.0          | 4.0          |           | 4.0          |
| Lane Util. Factor             | 1.00         | 0.95         |       |      | 0.95         |            |          |          | 1.00         | 1.00         |           | 1.00         |
| Frpb, ped/bikes               | 1.00         | 1.00         |       |      | 1.00         |            |          |          | 0.98         | 1.00         |           | 1.00         |
| Flpb, ped/bikes<br>Frt        | 1.00<br>1.00 | 1.00<br>1.00 |       |      | 1.00<br>0.99 |            |          |          | 1.00<br>0.86 | 1.00<br>1.00 |           | 1.00<br>0.85 |
| Fit Protected                 | 0.95         | 1.00         |       |      | 1.00         |            |          |          | 1.00         | 0.95         |           | 1.00         |
| Satd. Flow (prot)             | 1770         | 3537         |       |      | 3502         |            |          |          | 1585         | 1762         |           | 1583         |
| Flt Permitted                 | 0.95         | 1.00         |       |      | 1.00         |            |          |          | 1.00         | 0.95         |           | 1.00         |
| Satd. Flow (perm)             | 1770         | 3537         |       |      | 3502         |            |          |          | 1585         | 1762         |           | 1583         |
| Peak-hour factor, PHF         | 0.72         | 0.72         | 0.72  | 0.91 | 0.91         | 0.94       | 0.50     | 0.50     | 0.50         | 0.78         | 0.78      | 0.78         |
| Adj. Flow (vph)               | 124          | 1082         | 3     | 0.71 | 893          | 48         | 0.50     | 0.50     | 4            | 73           | 0.70      | 112          |
| RTOR Reduction (vph)          | 0            | 0            | 0     | 0    | 4            | 0          | 0        | 0        | 3            | 0            | 0         | 80           |
| Lane Group Flow (vph)         | 124          | 1085         | 0     | 0    | 937          | 0          | 0        | 0        | 1            | 73           | 0         | 32           |
| Confl. Peds. (#/hr)           | 121          | 1000         | 11    |      | 701          | 14         | · ·      |          | 4            | 4            | Ü         | 02           |
| Confl. Bikes (#/hr)           |              |              | 1     |      |              | 2          |          |          | •            | •            |           |              |
| Turn Type                     | Prot         | NA           |       |      | NA           |            |          |          | Perm         | Perm         |           | Perm         |
| Protected Phases              | 7            | 4            |       |      | 8            |            |          |          |              |              |           |              |
| Permitted Phases              |              |              |       |      |              |            |          |          | 2            | 6            |           | 6            |
| Actuated Green, G (s)         | 11.2         | 56.0         |       |      | 40.8         |            |          |          | 26.0         | 26.0         |           | 26.0         |
| Effective Green, g (s)        | 11.2         | 56.0         |       |      | 40.8         |            |          |          | 26.0         | 26.0         |           | 26.0         |
| Actuated g/C Ratio            | 0.12         | 0.62         |       |      | 0.45         |            |          |          | 0.29         | 0.29         |           | 0.29         |
| Clearance Time (s)            | 4.0          | 4.0          |       |      | 4.0          |            |          |          | 4.0          | 4.0          |           | 4.0          |
| Vehicle Extension (s)         | 3.0          | 3.0          |       |      | 3.0          |            |          |          | 3.0          | 3.0          |           | 3.0          |
| Lane Grp Cap (vph)            | 220          | 2200         |       |      | 1587         |            |          |          | 457          | 509          |           | 457          |
| v/s Ratio Prot                | c0.07        | 0.31         |       |      | c0.27        |            |          |          |              |              |           |              |
| v/s Ratio Perm                |              |              |       |      |              |            |          |          | 0.00         | c0.04        |           | 0.02         |
| v/c Ratio                     | 0.56         | 0.49         |       |      | 0.59         |            |          |          | 0.00         | 0.14         |           | 0.07         |
| Uniform Delay, d1             | 37.1         | 9.3          |       |      | 18.4         |            |          |          | 22.8         | 23.7         |           | 23.2         |
| Progression Factor            | 1.00         | 1.00         |       |      | 0.28         |            |          |          | 1.00         | 1.00         |           | 1.00         |
| Incremental Delay, d2         | 3.3          | 0.8          |       |      | 1.4          |            |          |          | 0.0          | 0.6          |           | 0.3          |
| Delay (s)                     | 40.4         | 10.1         |       |      | 6.5          |            |          |          | 22.8         | 24.3         |           | 23.5         |
| Level of Service              | D            | B            |       |      | A            |            |          | 22.0     | С            | С            | 22.0      | С            |
| Approach LOS                  |              | 13.2         |       |      | 6.5          |            |          | 22.8     |              |              | 23.8<br>C |              |
| Approach LOS                  |              | В            |       |      | Α            |            |          | С        |              |              | C         |              |
| Intersection Summary          |              |              | 11.0  |      | 014.0000     |            | <u> </u> |          |              |              |           |              |
| HCM 2000 Control Delay        | oltu veti -  |              | 11.3  | H    | CIVI 2000    | Level of S | service  |          | В            |              |           |              |
| HCM 2000 Volume to Capa       | icity ratio  |              | 0.44  | C    | ım of lo-    | time (a)   |          |          | 12.0         |              |           |              |
| Actuated Cycle Length (s)     | ntion        |              | 90.0  |      | um of lost   |            |          |          | 12.0         |              |           |              |
| Intersection Capacity Utiliza | 1110[]       |              | 42.9% | IC   | U Level (    | of Service |          |          | А            |              |           |              |
| Analysis Period (min)         |              |              | 15    |      |              |            |          |          |              |              |           |              |

c Critical Lane Group

| Movement   EBL   EBT   EBR   WBU   WBL   WBT   WBR   NBL   NBT   NBR   SBL   SBT   | Exioting - 1 reject    | <del>/ (171 1 1)</del> | · ···    |               |      |           |             |      |      |          | <u> </u> |             |      |
|--|------------------------|------------------------|----------|---------------|------|-----------|-------------|------|------|----------|----------|-------------|------|
| Lane Configurations  |                        | ٠                      | <b>→</b> | $\rightarrow$ | F    | •         | ←           | •    | 4    | <b>†</b> | /        | <b>&gt;</b> | ļ    |
| Traffic Volume (vehrh) 0 818 29 2 14 863 1 15 0 14 0 0   | Movement               | EBL                    | EBT      | EBR           | WBU  | WBL       | WBT         | WBR  | NBL  | NBT      | NBR      | SBL         | SBT  |
| Traffic Volume (vehrh) 0 818 29 2 14 863 1 15 0 14 0 0    Sign Control (vehrh) 0 818 30 2 15 863 1 21 0 19 0    Sign Control Free  | Lane Configurations    |                        | 4Tb      |               |      | 3         | <b>ት</b> ጌ  |      |      | - 43-    |          |             | - ♣  |
| Future Volume (Veh/h)  |                        | 0                      |          | 29            | 2    |           |             | 1    | 15   |          | 14       | 0           |      |
| Sign Control         Free Grade         Free Own Pack         Free Own Pack         Slop Own Pack         Slop Own Pack         Slop Own Pack         Own Pack Flour Factor         0.70         0.70         0.70         0.93         0.93         0.93         0.93         0.60         0.60         0.60         0.92         0.92         0.92         Description Flour Flo   |                        | 0                      | 818      | 30            | 2    | 15        | 863         | 1    | 21   | 0        | 19       | 0           | 0    |
| Grade 0,% 0,70 0,70 0,70 0,70 0,93 0,93 0,93 0,93 0,60 0,60 0,60 0,60 0,92 0,92 0,92 0,94 0,95 0,95 0,95 0,93 0,93 0,93 0,93 0,60 0,60 0,60 0,60 0,92 0,92 0,92 0,94 0,95 0,95 0,95 0,95 0,95 0,95 0,95 0,95   | , , ,                  |                        | Free     |               |      |           | Free        |      |      | Stop     |          |             | Stop |
| Hourly flow rate (vph) 0 1169 43 0 16 928 1 35 0 32 0 0 Pedestrians 6 15 Lane Width (ft) 12.0 12.0 Walking Speed (ft/s) 3.5 3.5 Percent Blockage 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8   |                        |                        | 0%       |               |      |           | 0%          |      |      |          |          |             |      |
| Pedestrians  | Peak Hour Factor       | 0.70                   | 0.70     | 0.70          | 0.93 | 0.93      | 0.93        | 0.93 | 0.60 | 0.60     | 0.60     | 0.92        | 0.92 |
| Pedestrians  | Hourly flow rate (vph) |                        |          |               |      |           |             |      |      |          |          |             |      |
| Walking Speed (ft/s)   | · · · ·                |                        |          |               |      |           |             |      |      | 6        |          |             | 15   |
| Walking Speed (ft/s) Percent Blockage Right furn flare (veh) Median type Median storage veh) Upstream signal (ft) Dys. platon unblocked 0.83 0.00 0.83 0.00 0.83 0.91 0.91 0.91 0.91 0.91 0.92 0.72 0.73 0.99 0.91 0.91 0.91 0.91 0.91 0.91 0.91   | Lane Width (ft)        |                        |          |               |      |           |             |      |      | 12.0     |          |             | 12.0 |
| Percent Blockage   Right turn flare (veh)   Median type   None    | ` '                    |                        |          |               |      |           |             |      |      |          |          |             |      |
| Right turn flare (veh)  Median storage veh)  Upstream signal (ft)  pX, platoon unblocked  0.83  0.00  0.83  0.00  0.83  0.01  0.91  0.91  0.91  0.83  0.91  0.91  0.91  0.91  0.83  0.91  0.91  0.91  0.91  0.83  0.91  0.91  0.91  0.91  0.83  0.91  0.91  0.91  0.91  0.91  0.92  162  1692  2172  612  1592  2194  C1, stage 1 conf vol  vC2, stage 2 conf vol  vCQ, unblocked vol  514  0  853  728  1254  123  618  1277  1C, single (s)  4.1  0.0  4.1  7.5  6.5  6.9  7.5  6.5  1C, 2 stage (s)  If (s)  p0 queue free %  100  0  98  87  100  96  87  100  96  87  100  96  100  100  cM capacity (veh/h)  854  0  645  0  645  0  67  0  Volume Total  584  628  16  619  310  67  0  Volume Right  0  43  0  0  1  32  0  CSH  Volume 10 Capacity  0  00  035  0  00  010  010  02  036  018  017  000  000  019  000  010  010  010   | • •                    |                        |          |               |      |           |             |      |      |          |          |             | 1    |
| Median type         None         None         None         None         Median storage veh)         Upstream signal (ft)         225         339         Secondary (and should also in the part of the par   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Median storage veh)         Upstream signal (ft)         225         339           pX, platoon unblocked         0.83         0.00         0.83         0.91         0.91         0.83         0.91   |                        |                        | None     |               |      |           | None        |      |      |          |          |             |      |
| Upstream signal (ft)   | 31                     |                        |          |               |      |           |             |      |      |          |          |             |      |
| pX, platoon unblocked  |                        |                        | 225      |               |      |           | 339         |      |      |          |          |             |      |
| vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol vC2, stage (s) vC2, stage (s) vC3, vC3, vC4, vC5, vC6, vC6, vC7, vC7, vC7, vC7, vC7, vC7, vC7, vC7  |                        | 0.83                   |          |               | 0.00 | 0.83      |             |      | 0.91 | 0.91     | 0.83     | 0.91        | 0.91 |
| vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol 514 0 853 728 1254 123 618 1277 tC, single (s) 4.1 0.0 4.1 7.5 6.5 6.9 7.5 6.5 tC, 2 stage (s) tF (s) 2.2 0.0 2.2 3.5 4.0 3.3 3.5 4.0 p0 queue free % 100 0 98 87 100 96 100 100 cM capacity (veh/h) 854 0 645 273 149 746 311 144    Direction, Lane # EB1 EB2 WB1 WB2 WB3 NB1 SB1   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| vC2, stage 2 conf vol vCu, unblocked vol vCu, vCu, vCu, unblocked vol vCu, vCu, vCu, vCu, vCu, vCu, vCu, vCu,  |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| vCu, unblocked vol         514         0         853         728         1254         123         618         1277           tC, single (s)         4.1         0.0         4.1         7.5         6.5         6.9         7.5         6.5           tC, 2 stage (s)         2.2         0.0         2.2         3.5         4.0         3.3         3.5         4.0           p0 queue free %         100         0         98         87         100         96         100         100           cM capacity (veh/h)         854         0         645         273         149         746         311         144           Direction, Lane #         EB1         EB2         WB1         WB2         WB3         NB1         SB1           Volume Total         584         628         16         619         310         67         0           Volume Left         0         0         16         0         0         35         0           Volume Right         0         43         0         0         1         32         0           cSH         854         1700         645         1700         391         1700  |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| tC, single (s) 4.1 0.0 4.1 7.5 6.5 6.9 7.5 6.5 tC, 2 stage (s) tF (s) 2.2 0.0 2.2 3.5 4.0 3.3 3.5 4.0 p0 queue free % 100 0 98 87 100 96 100 100 cM capacity (veh/h) 854 0 645 273 149 746 311 144      Direction, Lane # EB 1 EB 2 WB 1 WB 2 WB 3 NB 1 SB 1   |                        | 514                    |          |               | 0    | 853       |             |      | 728  | 1254     | 123      | 618         | 1277 |
| tC, 2 stage (s) tF (s)   |                        | 4.1                    |          |               | 0.0  | 4.1       |             |      | 7.5  | 6.5      | 6.9      | 7.5         | 6.5  |
| tF (s) 2.2 0.0 2.2 3.5 4.0 3.3 3.5 4.0 p0 queue free % 100 0 98 87 100 96 100 100 cM capacity (veh/h) 854 0 645 273 149 746 311 144    Direction, Lane # EB 1 EB 2 WB 1 WB 2 WB 3 NB 1 SB 1  |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| p0 queue free %       100       0       98       87       100       96       100       100         cM capacity (veh/h)       854       0       645       273       149       746       311       144         Direction, Lane #       EB 1       EB 2       WB 1       WB 2       WB 3       NB 1       SB 1         Volume Total       584       628       16       619       310       67       0         Volume Left       0       0       16       0       0       35       0         Volume Right       0       43       0       0       1       32       0         cSH       854       1700       645       1700       1700       391       1700         Volume to Capacity       0.00       0.37       0.02       0.36       0.18       0.17       0.00         Queue Length 95th (ft)       0       0       2       0       0       15       0         Control Delay (s)       0.0       0.0       10.7       0.0       0.0       16.1       0.0         Approach LOS       0       0       0       0       0       0       0       0       0 </td <td></td> <td>2.2</td> <td></td> <td></td> <td>0.0</td> <td>2.2</td> <td></td> <td></td> <td>3.5</td> <td>4.0</td> <td>3.3</td> <td>3.5</td> <td>4.0</td>  |                        | 2.2                    |          |               | 0.0  | 2.2       |             |      | 3.5  | 4.0      | 3.3      | 3.5         | 4.0  |
| CM capacity (veh/h)         854         0         645         273         149         746         311         144           Direction, Lane #         EB 1         EB 2         WB 1         WB 2         WB 3         NB 1         SB 1           Volume Total         584         628         16         619         310         67         0           Volume Left         0         0         16         0         0         35         0           Volume Right         0         43         0         0         1         32         0           cSH         854         1700         645         1700         1700         391         1700           Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach LOS         C         A           Intersection Summary  |                        | 100                    |          |               | 0    | 98        |             |      | 87   | 100      | 96       | 100         | 100  |
| Volume Total         584         628         16         619         310         67         0           Volume Left         0         0         16         0         0         35         0           Volume Right         0         43         0         0         1         32         0           CSH         854         1700         645         1700         1700         391         1700           Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A    Intersection Summary  Average Delay   |                        | 854                    |          |               | 0    | 645       |             |      | 273  | 149      | 746      |             | 144  |
| Volume Total         584         628         16         619         310         67         0           Volume Left         0         0         16         0         0         35         0           Volume Right         0         43         0         0         1         32         0           CSH         854         1700         645         1700         1700         391         1700           Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A    Intersection Summary  Average Delay   | Direction, Lane #      | EB 1                   | EB 2     | WB 1          | WB 2 | WB 3      | NB 1        | SB 1 |      |          |          |             |      |
| Volume Left         0         0         16         0         0         35         0           Volume Right         0         43         0         0         1         32         0           cSH         854         1700         645         1700         1700         391         1700           Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A    Intersection Summary  Average Delay  October   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Volume Right         0         43         0         0         1         32         0           cSH         854         1700         645         1700         1700         391         1700           Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A           Intersection Summary           Average Delay         0.6  |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| CSH 854 1700 645 1700 1700 391 1700  Volume to Capacity 0.00 0.37 0.02 0.36 0.18 0.17 0.00  Queue Length 95th (ft) 0 0 2 0 0 15 0  Control Delay (s) 0.0 0.0 10.7 0.0 0.0 16.1 0.0  Lane LOS B C A  Approach Delay (s) 0.0 0.2 16.1 0.0  Approach LOS C A  Intersection Summary  Average Delay 0.6   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Volume to Capacity         0.00         0.37         0.02         0.36         0.18         0.17         0.00           Queue Length 95th (ft)         0         0         2         0         0         15         0           Control Delay (s)         0.0         0.0         10.7         0.0         0.0         16.1         0.0           Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A           Intersection Summary           Average Delay         0.6   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Queue Length 95th (ft)       0       0       2       0       0       15       0         Control Delay (s)       0.0       0.0       10.7       0.0       0.0       16.1       0.0         Lane LOS       B       C       A         Approach Delay (s)       0.0       0.2       16.1       0.0         Approach LOS       C       A         Intersection Summary         Average Delay       0.6   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Control Delay (s) 0.0 0.0 10.7 0.0 0.0 16.1 0.0  Lane LOS B C A  Approach Delay (s) 0.0 0.2 16.1 0.0  Approach LOS C A  Intersection Summary  Average Delay 0.6  | . ,                    |                        |          |               |      |           |             |      |      |          |          |             |      |
| Lane LOS         B         C         A           Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A           Intersection Summary         Average Delay         0.6   |                        |                        |          |               |      |           |             |      |      |          |          |             |      |
| Approach Delay (s)         0.0         0.2         16.1         0.0           Approach LOS         C         A           Intersection Summary         Average Delay         0.6  |                        | 0.0                    | 0.0      |               | 0.0  | 0.0       |             |      |      |          |          |             |      |
| Approach LOS C A  Intersection Summary  Average Delay 0.6  |                        | 0.0                    |          |               |      |           |             |      |      |          |          |             |      |
| Average Delay 0.6  |                        | 0.0                    |          | 0.2           |      |           |             |      |      |          |          |             |      |
| Average Delay 0.6  | •                      |                        |          |               |      |           |             |      |      |          |          |             |      |
|  |                        |                        |          | 0.6           |      |           |             |      |      |          |          |             |      |
| intersection departing of the control of the contro |                        | ation                  |          |               | IC   | 'III evel | of Service  |      |      | Δ        |          |             |      |
| Analysis Period (min) 15   |                        | 20011                  |          |               |      | C LOVOI V | 0. 00. 1100 |      |      | , \      |          |             |      |



|                        | CDD  |
|------------------------|------|
| Movement               | SBR  |
| LaneConfigurations     |      |
| Traffic Volume (veh/h) | 0    |
| Future Volume (Veh/h)  | 0    |
| Sign Control           |      |
| Grade                  |      |
| Peak Hour Factor       | 0.92 |
| Hourly flow rate (vph) | 0    |
| Pedestrians            |      |
| Lane Width (ft)        |      |
| Walking Speed (ft/s)   |      |
| Percent Blockage       |      |
| Right turn flare (veh) |      |
| Median type            |      |
| Median storage veh)    |      |
| Upstream signal (ft)   |      |
| pX, platoon unblocked  | 0.83 |
| vC, conflicting volume | 480  |
| vC1, stage 1 conf vol  |      |
| vC2, stage 2 conf vol  |      |
| vCu, unblocked vol     | 0    |
| tC, single (s)         | 6.9  |
| tC, 2 stage (s)        |      |
| tF (s)                 | 3.3  |
| p0 queue free %        | 100  |
| cM capacity (veh/h)    | 884  |
| Direction Lane #       |      |
| Direction, Lane #      |      |

|                               | •          | ۶    | <b>→</b>   | *        | •          | <b>←</b>   | 4       | 1    | <b>†</b> | ~    | <b>/</b> | ţ     |
|-------------------------------|------------|------|------------|----------|------------|------------|---------|------|----------|------|----------|-------|
| Movement                      | EBU        | EBL  | EBT        | EBR      | WBL        | WBT        | WBR     | NBL  | NBT      | NBR  | SBL      | SBT   |
| Lane Configurations           |            | Ä    | <b>∱</b> ∱ |          |            | <b>∱</b> ∱ |         |      | 4        |      |          | 4     |
| Traffic Volume (vph)          | 6          | 66   | 731        | 1        | 0          | 700        | 35      | 0    | 0        | 0    | 126      | 0     |
| Future Volume (vph)           | 6          | 66   | 736        | 1        | 0          | 701        | 35      | 0    | 0        | 0    | 126      | 0     |
| Ideal Flow (vphpl)            | 1900       | 1900 | 1900       | 1900     | 1900       | 1900       | 1900    | 1900 | 1900     | 1900 | 1900     | 1900  |
| Total Lost time (s)           |            | 4.0  | 4.0        |          |            | 4.0        |         |      |          |      |          | 4.0   |
| Lane Util. Factor             |            | 1.00 | 0.95       |          |            | 0.95       |         |      |          |      |          | 1.00  |
| Frpb, ped/bikes               |            | 1.00 | 1.00       |          |            | 1.00       |         |      |          |      |          | 0.99  |
| Flpb, ped/bikes               |            | 1.00 | 1.00       |          |            | 1.00       |         |      |          |      |          | 1.00  |
| Frt                           |            | 1.00 | 1.00       |          |            | 0.99       |         |      |          |      |          | 0.93  |
| Flt Protected                 |            | 0.95 | 1.00       |          |            | 1.00       |         |      |          |      |          | 0.98  |
| Satd. Flow (prot)             |            | 1770 | 3539       |          |            | 3506       |         |      |          |      |          | 1670  |
| Flt Permitted                 |            | 0.95 | 1.00       |          |            | 1.00       |         |      |          |      |          | 0.85  |
| Satd. Flow (perm)             |            | 1770 | 3539       |          |            | 3506       |         |      |          |      |          | 1452  |
| Peak-hour factor, PHF         | 0.68       | 0.68 | 0.68       | 0.68     | 0.91       | 0.91       | 0.91    | 0.92 | 0.92     | 0.92 | 0.74     | 0.74  |
| Adj. Flow (vph)               | 9          | 97   | 1082       | 1        | 0          | 770        | 38      | 0    | 0        | 0    | 170      | 0     |
| RTOR Reduction (vph)          | 0          | 0    | 0          | 0        | 0          | 4          | 0       | 0    | 0        | 0    | 0        | 45    |
| Lane Group Flow (vph)         | 0          | 106  | 1083       | 0        | 0          | 804        | 0       | 0    | 0        | 0    | 0        | 316   |
| Confl. Peds. (#/hr)           |            | 100  | 1000       | 7        | , ,        | 001        | 13      | 11   | Ü        |      | Ü        | 010   |
| Confl. Bikes (#/hr)           |            |      |            | 1        |            |            | 1       | •    |          |      |          |       |
| Turn Type                     | Prot       | Prot | NA         | <u>'</u> |            | NA         | •       |      |          |      | Perm     | NA    |
| Protected Phases              | 7          | 7    | 4          |          |            | 8          |         |      | 2        |      | I CIIII  | 6     |
| Permitted Phases              | ,          | ,    | 7          |          |            | U          |         | 2    | ۷        |      | 6        | U     |
| Actuated Green, G (s)         |            | 9.6  | 49.0       |          |            | 35.4       |         | 2    |          |      | U        | 33.0  |
| Effective Green, g (s)        |            | 9.6  | 49.0       |          |            | 35.4       |         |      |          |      |          | 33.0  |
| Actuated g/C Ratio            |            | 0.11 | 0.54       |          |            | 0.39       |         |      |          |      |          | 0.37  |
| Clearance Time (s)            |            | 4.0  | 4.0        |          |            | 4.0        |         |      |          |      |          | 4.0   |
| Vehicle Extension (s)         |            | 3.0  | 3.0        |          |            | 3.0        |         |      |          |      |          | 3.0   |
| . ,                           |            |      |            |          |            |            |         |      |          |      |          |       |
| Lane Grp Cap (vph)            |            | 188  | 1926       |          |            | 1379       |         |      |          |      |          | 532   |
| v/s Ratio Prot                |            | 0.06 | c0.31      |          |            | 0.23       |         |      |          |      |          | -0.00 |
| v/s Ratio Perm                |            | 0.57 | 0.57       |          |            | 0.50       |         |      |          |      |          | c0.22 |
| v/c Ratio                     |            | 0.56 | 0.56       |          |            | 0.58       |         |      |          |      |          | 0.59  |
| Uniform Delay, d1             |            | 38.2 | 13.5       |          |            | 21.5       |         |      |          |      |          | 23.1  |
| Progression Factor            |            | 0.82 | 0.50       |          |            | 1.00       |         |      |          |      |          | 1.00  |
| Incremental Delay, d2         |            | 3.5  | 1.1        |          |            | 1.8        |         |      |          |      |          | 1.8   |
| Delay (s)                     |            | 34.8 | 7.8        |          |            | 23.3       |         |      |          |      |          | 24.9  |
| Level of Service              |            | С    | А          |          |            | С          |         |      |          |      |          | С     |
| Approach Delay (s)            |            |      | 10.2       |          |            | 23.3       |         |      | 0.0      |      |          | 24.9  |
| Approach LOS                  |            |      | В          |          |            | С          |         |      | Α        |      |          | С     |
| Intersection Summary          |            |      |            |          |            |            |         |      |          |      |          |       |
| HCM 2000 Control Delay        |            |      | 16.9       | H        | CM 2000    | Level of   | Service |      | В        |      |          |       |
| HCM 2000 Volume to Capa       | city ratio |      | 0.60       |          |            |            |         |      |          |      |          |       |
| Actuated Cycle Length (s)     |            |      | 90.0       | Sı       | um of lost | t time (s) |         |      | 12.0     |      |          |       |
| Intersection Capacity Utiliza | tion       |      | 53.1%      | IC       | U Level o  | of Service |         |      | Α        |      |          |       |
| Analysis Period (min)         |            |      | 15         |          |            |            |         |      |          |      |          |       |
| c Critical Lane Group         |            |      |            |          |            |            |         |      |          |      |          |       |



| Movement               | SBR  |
|------------------------|------|
| Lanconfigurations      |      |
| Traffic Volume (vph)   | 141  |
| Future Volume (vph)    | 141  |
| Ideal Flow (vphpl)     | 1900 |
| Total Lost time (s)    |      |
| Lane Util. Factor      |      |
| Frpb, ped/bikes        |      |
| Flpb, ped/bikes        |      |
| Frt                    |      |
| Flt Protected          |      |
| Satd. Flow (prot)      |      |
| Flt Permitted          |      |
| Satd. Flow (perm)      |      |
| Peak-hour factor, PHF  | 0.74 |
| Adj. Flow (vph)        | 191  |
| RTOR Reduction (vph)   | 0    |
| Lane Group Flow (vph)  | 0    |
| Confl. Peds. (#/hr)    | 11   |
| Confl. Bikes (#/hr)    |      |
| Turn Type              |      |
| Protected Phases       |      |
| Permitted Phases       |      |
| Actuated Green, G (s)  |      |
| Effective Green, g (s) |      |
| Actuated g/C Ratio     |      |
| Clearance Time (s)     |      |
| Vehicle Extension (s)  |      |
| Lane Grp Cap (vph)     |      |
| v/s Ratio Prot         |      |
| v/s Ratio Perm         |      |
| v/c Ratio              |      |
| Uniform Delay, d1      |      |
| Progression Factor     |      |
| Incremental Delay, d2  |      |
| Delay (s)              |      |
| Level of Service       |      |
| Approach Delay (s)     |      |
| Approach LOS           |      |
| Appluacii LO3          |      |
| Intersection Summary   |      |
|                        |      |

|                               | ۶     | <b>→</b> | •     | •    | <b>←</b>    | 4          | 4    | <b>†</b> | <i>&gt;</i> | <b>\</b> | <b>+</b> | 4    |
|-------------------------------|-------|----------|-------|------|-------------|------------|------|----------|-------------|----------|----------|------|
| Movement                      | EBL   | EBT      | EBR   | WBL  | WBT         | WBR        | NBL  | NBT      | NBR         | SBL      | SBT      | SBR  |
| Lane Configurations           |       | 4        |       |      | 4           |            |      | 4        |             |          | 4        |      |
| Traffic Volume (veh/h)        | 0     | 0        | 0     | 1    | 0           | 12         | 0    | 29       | 0           | 4        | 43       | 0    |
| Future Volume (Veh/h)         | 11    | 0        | 1     | 1    | 0           | 12         | 0    | 29       | 0           | 4        | 43       | 2    |
| Sign Control                  |       | Stop     |       |      | Stop        |            |      | Free     |             |          | Free     |      |
| Grade                         |       | 0%       |       |      | 0%          |            |      | 0%       |             |          | 0%       |      |
| Peak Hour Factor              | 0.60  | 0.60     | 0.60  | 0.60 | 0.60        | 0.60       | 0.60 | 0.60     | 0.60        | 0.60     | 0.60     | 0.60 |
| Hourly flow rate (vph)        | 18    | 0        | 2     | 2    | 0           | 20         | 0    | 48       | 0           | 7        | 72       | 3    |
| Pedestrians                   |       |          |       |      |             |            |      |          |             |          |          |      |
| Lane Width (ft)               |       |          |       |      |             |            |      |          |             |          |          |      |
| Walking Speed (ft/s)          |       |          |       |      |             |            |      |          |             |          |          |      |
| Percent Blockage              |       |          |       |      |             |            |      |          |             |          |          |      |
| Right turn flare (veh)        |       |          |       |      |             |            |      |          |             |          |          |      |
| Median type                   |       |          |       |      |             |            |      | None     |             |          | None     |      |
| Median storage veh)           |       |          |       |      |             |            |      |          |             |          |          |      |
| Upstream signal (ft)          |       |          |       |      |             |            |      |          |             |          |          |      |
| pX, platoon unblocked         |       |          |       |      |             |            |      |          |             |          |          |      |
| vC, conflicting volume        | 156   | 136      | 74    | 138  | 137         | 48         | 75   |          |             | 48       |          |      |
| vC1, stage 1 conf vol         |       |          |       |      |             |            |      |          |             |          |          |      |
| vC2, stage 2 conf vol         |       |          |       |      |             |            |      |          |             |          |          |      |
| vCu, unblocked vol            | 156   | 136      | 74    | 138  | 137         | 48         | 75   |          |             | 48       |          |      |
| tC, single (s)                | 7.1   | 6.5      | 6.2   | 7.1  | 6.5         | 6.2        | 4.1  |          |             | 4.1      |          |      |
| tC, 2 stage (s)               |       |          |       |      |             |            |      |          |             |          |          |      |
| tF (s)                        | 3.5   | 4.0      | 3.3   | 3.5  | 4.0         | 3.3        | 2.2  |          |             | 2.2      |          |      |
| p0 queue free %               | 98    | 100      | 100   | 100  | 100         | 98         | 100  |          |             | 100      |          |      |
| cM capacity (veh/h)           | 792   | 752      | 988   | 829  | 751         | 1021       | 1524 |          |             | 1559     |          |      |
| Direction, Lane #             | EB 1  | WB 1     | NB 1  | SB 1 |             |            |      |          |             |          |          |      |
| Volume Total                  | 20    | 22       | 48    | 82   |             |            |      |          |             |          |          |      |
| Volume Left                   | 18    | 2        | 0     | 7    |             |            |      |          |             |          |          |      |
| Volume Right                  | 2     | 20       | 0     | 3    |             |            |      |          |             |          |          |      |
| cSH                           | 808   | 1000     | 1524  | 1559 |             |            |      |          |             |          |          |      |
|                               | 0.02  | 0.02     | 0.00  | 0.00 |             |            |      |          |             |          |          |      |
| Volume to Capacity            | 0.02  | 0.02     | 0.00  | 0.00 |             |            |      |          |             |          |          |      |
| Queue Length 95th (ft)        | 9.6   | 8.7      | 0.0   | 0.7  |             |            |      |          |             |          |          |      |
| Control Delay (s)             |       |          | 0.0   |      |             |            |      |          |             |          |          |      |
| Lane LOS                      | A     | Α        | 0.0   | A    |             |            |      |          |             |          |          |      |
| Approach LOS                  | 9.6   | 8.7      | 0.0   | 0.7  |             |            |      |          |             |          |          |      |
| Approach LOS                  | А     | Α        |       |      |             |            |      |          |             |          |          |      |
| Intersection Summary          |       |          |       |      |             |            |      |          |             |          |          |      |
| Average Delay                 |       |          | 2.5   |      |             |            |      |          |             |          |          |      |
| Intersection Capacity Utiliza | ition |          | 15.6% | IC   | CU Level of | of Service |      |          | Α           |          |          |      |
| Analysis Period (min)         |       |          | 15    |      |             |            |      |          |             |          |          |      |

|   | ۶          | <b>→</b>   | •        | •    | <b>←</b>   | •          | 1       | <b>†</b> | <i>&gt;</i> | <b>/</b> | <b>+</b> | √    |
|---|------------|------------|----------|------|------------|------------|---------|----------|-------------|----------|----------|------|
| Movement                                | EBL        | EBT        | EBR      | WBL  | WBT        | WBR        | NBL     | NBT      | NBR         | SBL      | SBT      | SBR  |
| Lane Configurations                     | 7          | <b>∱</b> ∱ |          |      | <b>∱</b> } |            |         |          | 7           | ň        |          | 7    |
| Traffic Volume (vph)                    | 149        | 1353       | 0        | 0    | 710        | 60         | 0       | 0        | 6           | 51       | 0        | 43   |
| Future Volume (vph)                     | 149        | 1359       | 0        | 0    | 713        | 60         | 0       | 0        | 6           | 51       | 0        | 43   |
| Ideal Flow (vphpl)                      | 1900       | 1900       | 1900     | 1900 | 1900       | 1900       | 1900    | 1900     | 1900        | 1900     | 1900     | 1900 |
| Total Lost time (s)                     | 4.0        | 4.0        |          |      | 4.0        |            |         |          | 4.0         | 4.0      |          | 4.0  |
| Lane Util. Factor                       | 1.00       | 0.95       |          |      | 0.95       |            |         |          | 1.00        | 1.00     |          | 1.00 |
| Frpb, ped/bikes                         | 1.00       | 1.00       |          |      | 0.99       |            |         |          | 0.98        | 1.00     |          | 1.00 |
| Flpb, ped/bikes                         | 1.00       | 1.00       |          |      | 1.00       |            |         |          | 1.00        | 0.99     |          | 1.00 |
| Frt                                     | 1.00       | 1.00       |          |      | 0.99       |            |         |          | 0.86        | 1.00     |          | 0.85 |
| Flt Protected                           | 0.95       | 1.00       |          |      | 1.00       |            |         |          | 1.00        | 0.95     |          | 1.00 |
| Satd. Flow (prot)                       | 1770       | 3539       |          |      | 3474       |            |         |          | 1584        | 1761     |          | 1583 |
| Flt Permitted                           | 0.95       | 1.00       |          |      | 1.00       |            |         |          | 1.00        | 0.95     |          | 1.00 |
| Satd. Flow (perm)                       | 1770       | 3539       | 0.70     | 0.04 | 3474       | 0.04       | 0.50    | 0.50     | 1584        | 1761     | 0.70     | 1583 |
| Peak-hour factor, PHF                   | 0.72       | 0.72       | 0.72     | 0.91 | 0.91       | 0.94       | 0.50    | 0.50     | 0.50        | 0.78     | 0.78     | 0.78 |
| Adj. Flow (vph)                         | 207        | 1888       | 0        | 0    | 784        | 64         | 0       | 0        | 12          | 65       | 0        | 55   |
| RTOR Reduction (vph)                    | 0          | 1000       | 0        | 0    | 5          | 0          | 0       | 0        | 9           | 0        | 0        | 42   |
| Lane Group Flow (vph)                   | 207        | 1888       | 0<br>21  | 0    | 843        | 0<br>24    | 0       | 0        | 3           | 65<br>4  | 0        | 13   |
| Confl. Peds. (#/hr) Confl. Bikes (#/hr) |            |            | 1        |      |            | 3          |         |          | 4           | 4        |          |      |
|   | Drot       | NIA        | <u> </u> |      | NΙΛ        | 3          |         |          | Dorm        | Dorm     |          | Dorm |
| Turn Type Protected Phases              | Prot<br>7  | NA<br>4    |          |      | NA<br>8    |            |         |          | Perm        | Perm     |          | Perm |
| Permitted Phases                        | ,          | 4          |          |      | 0          |            |         |          | 2           | 6        |          | 6    |
| Actuated Green, G (s)                   | 17.3       | 76.0       |          |      | 54.7       |            |         |          | 26.0        | 26.0     |          | 26.0 |
| Effective Green, g (s)                  | 17.3       | 76.0       |          |      | 54.7       |            |         |          | 26.0        | 26.0     |          | 26.0 |
| Actuated g/C Ratio                      | 0.16       | 0.69       |          |      | 0.50       |            |         |          | 0.24        | 0.24     |          | 0.24 |
| Clearance Time (s)                      | 4.0        | 4.0        |          |      | 4.0        |            |         |          | 4.0         | 4.0      |          | 4.0  |
| Vehicle Extension (s)                   | 3.0        | 3.0        |          |      | 3.0        |            |         |          | 3.0         | 3.0      |          | 3.0  |
| Lane Grp Cap (vph)                      | 278        | 2445       |          |      | 1727       |            |         |          | 374         | 416      |          | 374  |
| v/s Ratio Prot                          | 0.12       | c0.53      |          |      | 0.24       |            |         |          | 071         | 110      |          | 071  |
| v/s Ratio Perm                          | 0.12       | 00.00      |          |      | 0.21       |            |         |          | 0.00        | c0.04    |          | 0.01 |
| v/c Ratio                               | 0.74       | 0.77       |          |      | 0.49       |            |         |          | 0.01        | 0.16     |          | 0.03 |
| Uniform Delay, d1                       | 44.2       | 11.3       |          |      | 18.4       |            |         |          | 32.1        | 33.3     |          | 32.3 |
| Progression Factor                      | 1.00       | 1.00       |          |      | 0.29       |            |         |          | 1.00        | 1.00     |          | 1.00 |
| Incremental Delay, d2                   | 10.3       | 2.4        |          |      | 0.9        |            |         |          | 0.0         | 0.8      |          | 0.2  |
| Delay (s)                               | 54.6       | 13.7       |          |      | 6.2        |            |         |          | 32.2        | 34.1     |          | 32.5 |
| Level of Service                        | D          | В          |          |      | Α          |            |         |          | С           | С        |          | С    |
| Approach Delay (s)                      |            | 17.7       |          |      | 6.2        |            |         | 32.2     |             |          | 33.4     |      |
| Approach LOS                            |            | В          |          |      | Α          |            |         | С        |             |          | С        |      |
| Intersection Summary                    |            |            |          |      |            |            |         |          |             |          |          |      |
| HCM 2000 Control Delay                  |            |            | 15.2     | H    | CM 2000    | Level of S | Service |          | В           |          |          |      |
| HCM 2000 Volume to Capac                | city ratio |            | 0.64     |      |            |            |         |          |             |          |          |      |
| Actuated Cycle Length (s)               |            |            | 110.0    | Sı   | um of lost | time (s)   |         |          | 12.0        |          |          |      |
| Intersection Capacity Utilizat          | tion       |            | 54.9%    | IC   | U Level o  | of Service |         |          | Α           |          |          |      |
| Analysis Period (min)                   |            |            | 15       |      |            |            |         |          |             |          |          |      |
| Intersection Capacity Utilizat          | tion       |            | 54.9%    |      |            |            |         |          |             |          |          |      |

c Critical Lane Group

| Externing + 1 Tojout          |       |          |               |      |          |            |      |      |          |      |             |      |
|-------------------------------|-------|----------|---------------|------|----------|------------|------|------|----------|------|-------------|------|
|                               | ٠     | <b>→</b> | $\rightarrow$ | F    | •        | ←          | •    | 4    | <b>†</b> | /    | <b>&gt;</b> | ļ    |
| Movement                      | EBL   | EBT      | EBR           | WBU  | WBL      | WBT        | WBR  | NBL  | NBT      | NBR  | SBL         | SBT  |
| Lane Configurations           |       | 4îb      |               |      | ă        | <b>↑</b> ↑ |      |      | 4        |      |             | 4    |
| Traffic Volume (veh/h)        | 0     | 1310     | 89            | 4    | 25       | 746        | 1    | 7    | 0        | 21   | 0           | 0    |
| Future Volume (Veh/h)         | 0     | 1310     | 95            | 4    | 30       | 746        | 1    | 10   | 0        | 23   | 0           | 0    |
| Sign Control                  |       | Free     |               |      |          | Free       |      |      | Stop     |      |             | Stop |
| Grade                         |       | 0%       |               |      |          | 0%         |      |      | 0%       |      |             | 0%   |
| Peak Hour Factor              | 0.70  | 0.70     | 0.70          | 0.93 | 0.93     | 0.93       | 0.93 | 0.60 | 0.60     | 0.60 | 0.92        | 0.92 |
| Hourly flow rate (vph)        | 0     | 1871     | 136           | 0    | 32       | 802        | 1    | 17   | 0        | 38   | 0           | 0    |
| Pedestrians                   |       |          |               |      |          |            |      |      | 24       |      |             | 26   |
| Lane Width (ft)               |       |          |               |      |          |            |      |      | 12.0     |      |             | 12.0 |
| Walking Speed (ft/s)          |       |          |               |      |          |            |      |      | 3.5      |      |             | 3.5  |
| Percent Blockage              |       |          |               |      |          |            |      |      | 2        |      |             | 2    |
| Right turn flare (veh)        |       |          |               |      |          |            |      |      |          |      |             |      |
| Median type                   |       | None     |               |      |          | None       |      |      |          |      |             |      |
| Median storage veh)           |       |          |               |      |          |            |      |      |          |      |             |      |
| Upstream signal (ft)          |       | 225      |               |      |          | 339        |      |      |          |      |             |      |
| pX, platoon unblocked         | 0.86  |          |               | 0.00 | 0.62     |            |      | 0.69 | 0.69     | 0.62 | 0.69        | 0.69 |
| vC, conflicting volume        | 829   |          |               | 0    | 2031     |            |      | 2429 | 2856     | 1028 | 1866        | 2924 |
| vC1, stage 1 conf vol         |       |          |               |      |          |            |      |      |          |      |             |      |
| vC2, stage 2 conf vol         |       |          |               |      |          |            |      |      |          |      |             |      |
| vCu, unblocked vol            | 467   |          |               | 0    | 1428     |            |      | 1236 | 1857     | 0    | 418         | 1955 |
| tC, single (s)                | 4.1   |          |               | 0.0  | 4.1      |            |      | 7.5  | 6.5      | 6.9  | 7.5         | 6.5  |
| tC, 2 stage (s)               |       |          |               |      |          |            |      |      |          |      |             |      |
| tF (s)                        | 2.2   |          |               | 0.0  | 2.2      |            |      | 3.5  | 4.0      | 3.3  | 3.5         | 4.0  |
| p0 queue free %               | 100   |          |               | 0    | 89       |            |      | 78   | 100      | 94   | 100         | 100  |
| cM capacity (veh/h)           | 912   |          |               | 0    | 284      |            |      | 78   | 42       | 653  | 289         | 37   |
| Direction, Lane #             | EB 1  | EB 2     | WB 1          | WB 2 | WB 3     | NB 1       | SB 1 |      |          |      |             |      |
| Volume Total                  | 936   | 1072     | 32            | 535  | 268      | 55         | 1    |      |          |      |             |      |
| Volume Left                   | 0     | 0        | 32            | 0    | 0        | 17         | 0    |      |          |      |             |      |
| Volume Right                  | 0     | 136      | 0             | 0    | 1        | 38         | 1    |      |          |      |             |      |
| cSH                           | 912   | 1700     | 284           | 1700 | 1700     | 200        | 907  |      |          |      |             |      |
| Volume to Capacity            | 0.00  | 0.63     | 0.11          | 0.31 | 0.16     | 0.28       | 0.00 |      |          |      |             |      |
| Queue Length 95th (ft)        | 0     | 0        | 9             | 0    | 0        | 27         | 0    |      |          |      |             |      |
| Control Delay (s)             | 0.0   | 0.0      | 19.3          | 0.0  | 0.0      | 29.7       | 9.0  |      |          |      |             |      |
| Lane LOS                      |       |          | С             |      |          | D          | Α    |      |          |      |             |      |
| Approach Delay (s)            | 0.0   |          | 0.7           |      |          | 29.7       | 9.0  |      |          |      |             |      |
| Approach LOS                  |       |          |               |      |          | D          | Α    |      |          |      |             |      |
| Intersection Summary          |       |          |               |      |          |            |      |      |          |      |             |      |
| Average Delay                 |       |          | 0.8           |      |          |            |      |      |          |      |             |      |
| Intersection Capacity Utiliza | ation |          | 54.0%         | IC   | CU Level | of Service |      |      | Α        |      |             |      |
| Analysis Period (min)         |       |          | 15            |      |          |            |      |      |          |      |             |      |



| Movement               | SBR  |
|------------------------|------|
| Lanaconfigurations     |      |
| Traffic Volume (veh/h) | 1    |
| Future Volume (Veh/h)  | 1    |
| Sign Control           |      |
| Grade                  |      |
| Peak Hour Factor       | 0.92 |
| Hourly flow rate (vph) | 1    |
| Pedestrians            |      |
| Lane Width (ft)        |      |
| Walking Speed (ft/s)   |      |
| Percent Blockage       |      |
| Right turn flare (veh) |      |
| Median type            |      |
| Median storage veh)    |      |
| Upstream signal (ft)   |      |
| pX, platoon unblocked  | 0.86 |
| vC, conflicting volume | 428  |
| vC1, stage 1 conf vol  |      |
| vC2, stage 2 conf vol  |      |
| vCu, unblocked vol     | 0    |
| tC, single (s)         | 6.9  |
| tC, 2 stage (s)        |      |
| tF (s)                 | 3.3  |
| p0 queue free %        | 100  |
| cM capacity (veh/h)    | 907  |
| Direction, Lane #      |      |
| Direction, Lane #      |      |

|                                 | •         | ۶    | <b>→</b>   | •    | •          | <b>←</b>   | 4       | 1    | <b>†</b> | ~    | <b>/</b> | <del> </del> |
|---------------------------------|-----------|------|------------|------|------------|------------|---------|------|----------|------|----------|--------------|
| Movement                        | EBU       | EBL  | EBT        | EBR  | WBL        | WBT        | WBR     | NBL  | NBT      | NBR  | SBL      | SBT          |
| Lane Configurations             |           | ă    | <b>∱</b> ∱ |      |            | <b>ተ</b> ኈ |         |      | 4        |      |          | 4            |
| Traffic Volume (vph)            | 6         | 93   | 1218       | 9    | 0          | 684        | 48      | 2    | 1        | 1    | 57       | 2            |
| Future Volume (vph)             | 6         | 93   | 1220       | 9    | 0          | 689        | 48      | 2    | 1        | 1    | 57       | 2            |
| Ideal Flow (vphpl)              | 1900      | 1900 | 1900       | 1900 | 1900       | 1900       | 1900    | 1900 | 1900     | 1900 | 1900     | 1900         |
| Total Lost time (s)             |           | 4.0  | 4.0        |      |            | 4.0        |         |      | 4.0      |      |          | 4.0          |
| Lane Util. Factor               |           | 1.00 | 0.95       |      |            | 0.95       |         |      | 1.00     |      |          | 1.00         |
| Frpb, ped/bikes                 |           | 1.00 | 1.00       |      |            | 0.99       |         |      | 1.00     |      |          | 0.99         |
| Flpb, ped/bikes                 |           | 1.00 | 1.00       |      |            | 1.00       |         |      | 1.00     |      |          | 1.00         |
| Frt                             |           | 1.00 | 1.00       |      |            | 0.99       |         |      | 0.97     |      |          | 0.93         |
| Flt Protected                   |           | 0.95 | 1.00       |      |            | 1.00       |         |      | 0.98     |      |          | 0.98         |
| Satd. Flow (prot)               |           | 1770 | 3534       |      |            | 3484       |         |      | 1748     |      |          | 1663         |
| Flt Permitted                   |           | 0.95 | 1.00       |      |            | 1.00       |         |      | 0.93     |      |          | 0.87         |
| Satd. Flow (perm)               |           | 1770 | 3534       |      |            | 3484       |         |      | 1667     |      |          | 1480         |
| Peak-hour factor, PHF           | 0.68      | 0.68 | 0.68       | 0.68 | 0.91       | 0.91       | 0.91    | 0.92 | 0.92     | 0.92 | 0.74     | 0.74         |
| Adj. Flow (vph)                 | 9         | 137  | 1794       | 13   | 0          | 757        | 53      | 2    | 1        | 1    | 77       | 3            |
| RTOR Reduction (vph)            | 0         | 0    | 0          | 0    | 0          | 5          | 0       | 0    | 1        | 0    | 0        | 40           |
| Lane Group Flow (vph)           | 0         | 146  | 1807       | 0    | 0          | 805        | 0       | 0    | 3        | 0    | 0        | 139          |
| Confl. Peds. (#/hr)             |           |      |            | 30   |            |            | 22      | 12   |          |      |          |              |
| Confl. Bikes (#/hr)             |           |      |            | 3    |            |            | 3       |      |          |      |          |              |
| Turn Type                       | Prot      | Prot | NA         |      |            | NA         |         | Perm | NA       |      | Perm     | NA           |
| Protected Phases                | 7         | 7    | 4          |      |            | 8          |         |      | 2        |      |          | 6            |
| Permitted Phases                |           | 4.0  | 7.4.0      |      |            | <b>540</b> |         | 2    |          |      | 6        | 00.0         |
| Actuated Green, G (s)           |           | 16.0 | 74.0       |      |            | 54.0       |         |      | 28.0     |      |          | 28.0         |
| Effective Green, g (s)          |           | 16.0 | 74.0       |      |            | 54.0       |         |      | 28.0     |      |          | 28.0         |
| Actuated g/C Ratio              |           | 0.15 | 0.67       |      |            | 0.49       |         |      | 0.25     |      |          | 0.25         |
| Clearance Time (s)              |           | 4.0  | 4.0        |      |            | 4.0        |         |      | 4.0      |      |          | 4.0          |
| Vehicle Extension (s)           |           | 3.0  | 3.0        |      |            | 3.0        |         |      | 3.0      |      |          | 3.0          |
| Lane Grp Cap (vph)              |           | 257  | 2377       |      |            | 1710       |         |      | 424      |      |          | 376          |
| v/s Ratio Prot                  |           | 0.08 | c0.51      |      |            | 0.23       |         |      | 0.00     |      |          | 0.00         |
| v/s Ratio Perm                  |           | 0.53 | 0.77       |      |            | 0.47       |         |      | 0.00     |      |          | c0.09        |
| v/c Ratio                       |           | 0.57 | 0.76       |      |            | 0.47       |         |      | 0.01     |      |          | 0.37         |
| Uniform Delay, d1               |           | 43.8 | 12.1       |      |            | 18.5       |         |      | 30.6     |      |          | 33.7         |
| Progression Factor              |           | 0.79 | 0.26       |      |            | 1.00       |         |      | 1.00     |      |          | 1.00         |
| Incremental Delay, d2           |           | 2.0  | 1.7        |      |            | 0.9        |         |      | 0.0      |      |          | 0.6          |
| Delay (s)                       |           | 36.5 | 4.8        |      |            | 19.5       |         |      | 30.7     |      |          | 34.3         |
| Level of Service                |           | D    | A          |      |            | B          |         |      | C        |      |          | C            |
| Approach Delay (s)              |           |      | 7.1        |      |            | 19.5       |         |      | 30.7     |      |          | 34.3         |
| Approach LOS                    |           |      | Α          |      |            | В          |         |      | С        |      |          | С            |
| Intersection Summary            |           |      |            |      |            |            |         |      |          |      |          |              |
| HCM 2000 Control Delay          |           |      | 12.2       | H    | CM 2000    | Level of S | Service |      | В        |      |          |              |
| HCM 2000 Volume to Capaci       | ity ratio |      | 0.68       |      |            |            |         |      |          |      |          |              |
| Actuated Cycle Length (s)       |           |      | 110.0      |      | um of lost |            |         |      | 12.0     |      |          |              |
| Intersection Capacity Utilizati | on        |      | 55.0%      | IC   | U Level o  | of Service |         |      | Α        |      |          |              |
| Analysis Period (min)           |           |      | 15         |      |            |            |         |      |          |      |          |              |

c Critical Lane Group

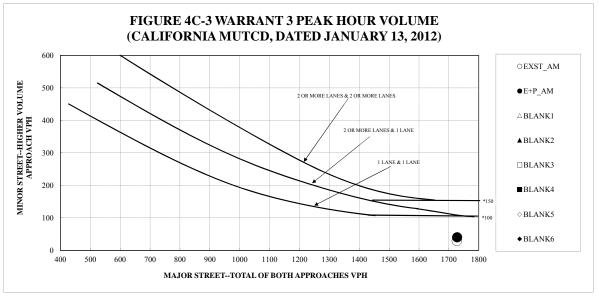


| Movement                         | SBR  |
|----------------------------------|------|
| LaneConfigurations               |      |
| Traffic Volume (vph)             | 73   |
| Future Volume (vph)              | 73   |
| Ideal Flow (vphpl)               | 1900 |
| Total Lost time (s)              |      |
| Lane Util. Factor                |      |
| Frpb, ped/bikes                  |      |
| Flpb, ped/bikes                  |      |
| Frt                              |      |
| Flt Protected                    |      |
| Satd. Flow (prot)                |      |
| Flt Permitted                    |      |
| Satd. Flow (perm)                |      |
| Peak-hour factor, PHF            | 0.74 |
| Adj. Flow (vph)                  | 99   |
| RTOR Reduction (vph)             | 0    |
| Lane Group Flow (vph)            | 0    |
| Confl. Peds. (#/hr)              | 12   |
| Confl. Bikes (#/hr)              |      |
| Turn Type                        |      |
| Protected Phases                 |      |
| Permitted Phases                 |      |
| Actuated Green, G (s)            |      |
| Effective Green, g (s)           |      |
| Actuated g/C Ratio               |      |
| Clearance Time (s)               |      |
| Vehicle Extension (s)            |      |
| Lane Grp Cap (vph)               |      |
| v/s Ratio Prot                   |      |
| v/s Ratio Prot<br>v/s Ratio Perm |      |
| v/c Ratio                        |      |
|                                  |      |
| Uniform Delay, d1                |      |
| Progression Factor               |      |
| Incremental Delay, d2            |      |
| Delay (s)                        |      |
| Level of Service                 |      |
| Approach LOS                     |      |
| Approach LOS                     |      |
| Intersection Summary             |      |
|                                  |      |

|                                | ۶    | <b>→</b> | •     | €    | +        | •          | •    | <b>†</b> | <i>&gt;</i> | <b>/</b> | <b>↓</b> | ✓    |
|--------------------------------|------|----------|-------|------|----------|------------|------|----------|-------------|----------|----------|------|
| Movement                       | EBL  | EBT      | EBR   | WBL  | WBT      | WBR        | NBL  | NBT      | NBR         | SBL      | SBT      | SBR  |
| Lane Configurations            |      | 4        |       |      | 4        |            |      | 4        |             |          | 4        |      |
| Traffic Volume (veh/h)         | 0    | 0        | 0     | 0    | 0        | 5          | 0    | 28       | 1           | 7        | 114      | 0    |
| Future Volume (Veh/h)          | 5    | 0        | 0     | 0    | 0        | 5          | 1    | 28       | 1           | 7        | 114      | 11   |
| Sign Control                   |      | Stop     |       |      | Stop     |            |      | Free     |             |          | Free     |      |
| Grade                          |      | 0%       |       |      | 0%       |            |      | 0%       |             |          | 0%       |      |
| Peak Hour Factor               | 0.60 | 0.60     | 0.60  | 0.60 | 0.60     | 0.60       | 0.60 | 0.60     | 0.60        | 0.60     | 0.60     | 0.60 |
| Hourly flow rate (vph)         | 8    | 0        | 0     | 0    | 0        | 8          | 2    | 47       | 2           | 12       | 190      | 18   |
| Pedestrians                    |      |          |       |      |          |            |      |          |             |          | 4        |      |
| Lane Width (ft)                |      |          |       |      |          |            |      |          |             |          | 12.0     |      |
| Walking Speed (ft/s)           |      |          |       |      |          |            |      |          |             |          | 3.5      |      |
| Percent Blockage               |      |          |       |      |          |            |      |          |             |          | 0        |      |
| Right turn flare (veh)         |      |          |       |      |          |            |      |          |             |          |          |      |
| Median type                    |      |          |       |      |          |            |      | None     |             |          | None     |      |
| Median storage veh)            |      |          |       |      |          |            |      |          |             |          |          |      |
| Upstream signal (ft)           |      |          |       |      |          |            |      |          |             |          |          |      |
| pX, platoon unblocked          |      |          |       |      |          |            |      |          |             |          |          |      |
| vC, conflicting volume         | 287  | 276      | 199   | 275  | 284      | 52         | 208  |          |             | 49       |          |      |
| vC1, stage 1 conf vol          |      |          |       |      |          |            |      |          |             |          |          |      |
| vC2, stage 2 conf vol          |      |          |       |      |          |            |      |          |             |          |          |      |
| vCu, unblocked vol             | 287  | 276      | 199   | 275  | 284      | 52         | 208  |          |             | 49       |          |      |
| tC, single (s)                 | 7.1  | 6.5      | 6.2   | 7.1  | 6.5      | 6.2        | 4.1  |          |             | 4.1      |          |      |
| tC, 2 stage (s)                |      |          |       |      |          |            |      |          |             |          |          |      |
| tF (s)                         | 3.5  | 4.0      | 3.3   | 3.5  | 4.0      | 3.3        | 2.2  |          |             | 2.2      |          |      |
| p0 queue free %                | 99   | 100      | 100   | 100  | 100      | 99         | 100  |          |             | 99       |          |      |
| cM capacity (veh/h)            | 653  | 626      | 842   | 673  | 619      | 1012       | 1363 |          |             | 1558     |          |      |
| Direction, Lane #              | EB 1 | WB 1     | NB 1  | SB 1 |          |            |      |          |             |          |          |      |
| Volume Total                   | 8    | 8        | 51    | 220  |          |            |      |          |             |          |          |      |
| Volume Left                    | 8    | 0        | 2     | 12   |          |            |      |          |             |          |          |      |
| Volume Right                   | 0    | 8        | 2     | 18   |          |            |      |          |             |          |          |      |
| cSH                            | 653  | 1012     | 1363  | 1558 |          |            |      |          |             |          |          |      |
| Volume to Capacity             | 0.01 | 0.01     | 0.00  | 0.01 |          |            |      |          |             |          |          |      |
| Queue Length 95th (ft)         | 1    | 1        | 0     | 1    |          |            |      |          |             |          |          |      |
| Control Delay (s)              | 10.6 | 8.6      | 0.3   | 0.5  |          |            |      |          |             |          |          |      |
| Lane LOS                       | В    | A        | A     | A    |          |            |      |          |             |          |          |      |
| Approach Delay (s)             | 10.6 | 8.6      | 0.3   | 0.5  |          |            |      |          |             |          |          |      |
| Approach LOS                   | В    | A        | 0.0   | 0.0  |          |            |      |          |             |          |          |      |
| Intersection Summary           |      |          |       |      |          |            |      |          |             |          |          |      |
| Average Delay                  |      |          | 0.9   |      |          |            |      |          |             |          |          |      |
| Intersection Capacity Utilizat | tion |          | 23.0% | IC   | :U Level | of Service |      |          | Α           |          |          |      |
| Analysis Period (min)          |      |          | 15    | ,.   | 2 = 3.01 |            |      |          | ,,          |          |          |      |

# Appendix Exhibit B California MUTCD Signal Warrant Analysis

### SCENARIOS: "AM PEAK HOUR" CONDITIONS



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

| CCENADIO | APPRO | WARRANT |              |
|----------|-------|---------|--------------|
| SCENARIO | MAJOR | MINOR   | MET?         |
| EXST_AM  | 1727  | 29      | NO           |
| E+P_AM   | 1728  | 40      | NO           |
| BLANK1   | 0     | 0       |              |
| BLANK2   | 0     | 0       |              |
| BLANK3   | 0     | 0       |              |
| BLANK4   | 0     | 0       |              |
| BLANK5   | 0     | 0       |              |
| BLANK6   | 0     | 0       |              |
| BLANK5   | 0     | 0       | nor approach |

Note: Major approach is the total of both approaches. Minor approach is the ighest of both approaches.

Date: February 17, 2017 Intersection No.: 2

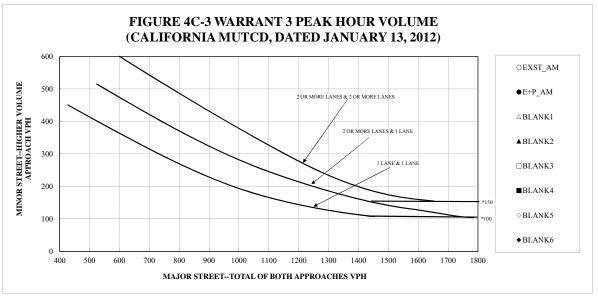
Castro Valley Boulevard / Baker Street Intersection:

Number of lanes on MAJOR street: 2

Number of lanes on MINOR street:







\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

| CCENADIO             | APPRO                | WARRANT          |                      |
|----------------------|----------------------|------------------|----------------------|
| SCENARIO             | MAJOR                | MINOR            | MET?                 |
| EXST_AM              | 76                   | 13               | NO                   |
| E+P_AM               | 78                   | 13               | NO                   |
| BLANK1               | 0                    | 0                |                      |
| BLANK2               | 0                    | 0                |                      |
| BLANK3               | 0                    | 0                |                      |
| BLANK4               | 0                    | 0                |                      |
| BLANK5               | 0                    | 0                |                      |
| BLANK6               | 0                    | 0                |                      |
| Note: Major approacl | h is the total of bo | th approaches. M | inor approach is the |

Date: February 17, 2017 Intersection No.: 4

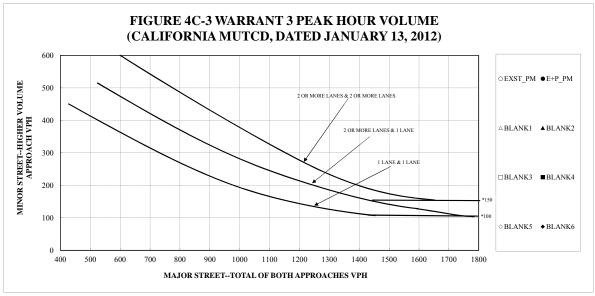
Intersection: Baker Road / Project Access Driveway / Private Roadway

Number of lanes on MAJOR street: 1

Number of lanes on MINOR street: 1



highest of both approaches.



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

| SCENARIO | APPRO | WARRANT |      |
|----------|-------|---------|------|
| SCENARIO | MAJOR | MINOR   | MET? |
| EXST_PM  | 2175  | 28      | NO   |
| E+P_PM   | 2186  | 33      | NO   |
| BLANK1   | 0     | 0       |      |
| BLANK2   | 0     | 0       |      |
| BLANK3   | 0     | 0       |      |
| BLANK4   | 0     | 0       |      |
| BLANK5   | 0     | 0       |      |
| BLANK6   | 0     | 0       |      |

Note: Major approach is the total of both approaches. Minor approach is the highest of both approaches.

Date: February 17, 2017 Intersection No.: 2

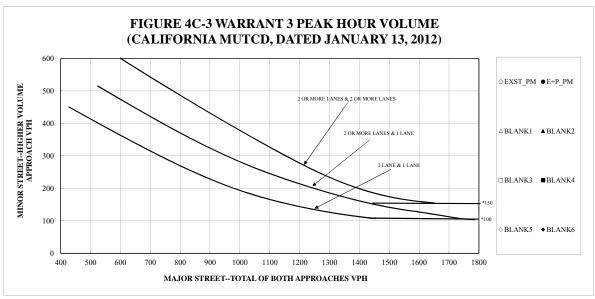
Intersection: Castro Valley Boulevard / Baker Street

Number of lanes on MAJOR street: 2

Number of lanes on MINOR street: 1







\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

| SCENARIO             | APPRO                 | WARRANT         |                     |
|----------------------|-----------------------|-----------------|---------------------|
| SCENARIO             | MAJOR                 | MINOR           | MET?                |
| EXST_PM              | 150                   | 5               | NO                  |
| E+P_PM               | 162                   | 5               | NO                  |
| BLANK1               | 0                     | 0               |                     |
| BLANK2               | 0                     | 0               |                     |
| BLANK3               | 0                     | 0               |                     |
| BLANK4               | 0                     | 0               |                     |
| BLANK5               | 0                     | 0               |                     |
| BLANK6               | 0                     | 0               |                     |
| Note: Major approacl | n is the total of bot | h approaches. M | nor approach is the |

Date: February 17, 2017 Intersection No.: 4

Intersection: Baker Road / Project Access Driveway / Private Roadway

Number of lanes on MAJOR street: 1

Number of lanes on MINOR street: 1

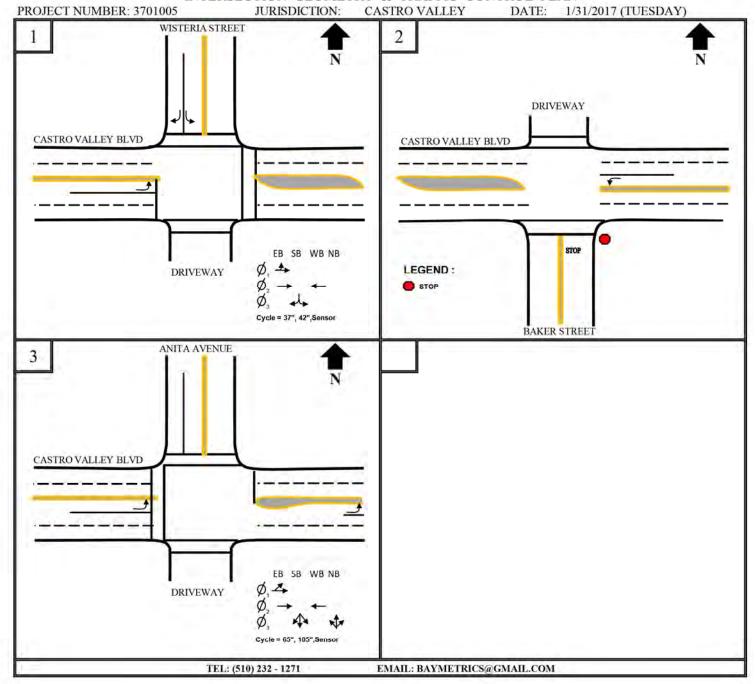


highest of both approaches

### Appendix C Existing Traffic Counts

### **BAYMETRICS**

INTERSECTION GEOMETRY & TRAFFIC CONTROL PLAN



| PROJECT:                                 | TRAFFIC COUNTS   | S IN CASTRO                                    | O VALLEY    | SURVE                | Y DATE:                     |              | 1/3        | 31/201  | 7        | DAY:              | TUESDA       | ΑY       |              |
|--|--|--|-------------|----------------------|-----------------------------|--------------|------------|---------|----------|-------------------|--------------|----------|--------------|
| N-S APPROACH:                            | WISTERIA STREE   | ET   |             |                      | EY TIME: 7:00 AM TO 9:00 AM |              |            |         |          |                   |              |          |              |
| E-W APPROACH:                            | CASTRO VALLEY  | BOULEVAI                                       | RD          | JURISI               | DICTION                     | : C          | CASTRO     | VAL     | LEY :    | FILE:             | 3701005      | -1AM     |              |
| PEAK HOUR 7:45 AM to 8:45 A              |  | 0 57   | 0           | ↑<br>NORTH           |                             |              | ARRIV      | VAL / 1 | DEPARTU  | JRE VOI           | LUMES        |          |              |
|  |  |  |             |                      |                             | I            | PHF =      | 0.78    |          |                   |              |          |              |
|  |  | ↓  | <b>U</b>    | 1                    |                             |              |            | 144     | 133      |                   |              |          |              |
| 1  |  |  |             | 45                   |                             |              |            | 1       | <b>†</b> | F                 | PHF = 0.91   |          |              |
| 88                                       | <b>╡</b> ⊸┥  ┌   | 807  |             | 895                  |                             | <u> </u>     |            | L       | 852      |                   |              |          |              |
| 778                                      |  | 1867   | 0 *         |                      |                             | <b>←</b>     |            |         | •        |                   |              |          |              |
| 2  |  |  |             | 0                    | L                           | 869          | _          | 1       | <b>†</b> | $\longrightarrow$ | 837          |          |              |
| CASTRO VALLEY BO                         | JLEVARD \  | $\uparrow$                                     |             |                      |                             | PHF = 0.72   |            | Ų.      |          |                   |              |          |              |
|  | 0  | 0 0  | * No Lef    | t Turn               |                             |              |            | 2       | 2        |                   |              |          |              |
|  | WISTERIA   |  | <u> </u>    |                      |                             |              |            |         | PHF =    | 0.50              |              |          |              |
| TIME PERIOD                              | NORTHBO  | OUND   | SOUTI       | HBOUND               |                             | EASTB        | OUND       |         |          | WEST              | BOUND        |          | TOTAL        |
| From To                                  |  |  | U-TURN LEFT |                      | U-TURN                      | LEFT         | THRU R     | RIGHT   | U-TURN   | LEFT              | THRU         | RIGHT    |              |
|  |  |  | SU          | RVEY I               | DATA                        |              |            |         |          |                   |              |          |              |
| 7:00 AM to 7:15 A                        |  | 0  | 11          | 28                   | 0                           | 13           | 94         | 0       |          |                   | 146          | 4        | 296          |
| 7:15 AM to 7:30 A                        |  | 0  | 16          | 53                   | 0                           | 31           | 203        | 0       |          |                   | 286          | 11       | 600          |
| 7:30 AM to 7:45 A                        |  | 0  | 29          | 89                   | 0                           | 50           | 379        | 0       |          |                   | 435          | 17       | 999          |
| 7:45 AM to 8:00 A                        |  | 1  | 51          | 113                  | 0                           | 71           | 658<br>953 | 0       |          |                   | 629          | 24       | 1547         |
| 8:00 AM to 8:15 Al<br>8:15 AM to 8:30 Al |  | 1  | 63<br>77    | 140<br>161           | 1                           | 90<br>119    | 853<br>990 | 0       |          |                   | 854<br>1054  | 34<br>51 | 2036<br>2454 |
| 8:30 AM to 8:45 A                        |  | 2  | 86          | 176                  | 1                           |              | 1157       | 2       |          |                   | 1034         | 62       | 2866         |
| 8:45 AM to 9:00 A                        |  | 2  | 92          | 194                  | 1                           |              | 1316       | 2       |          |                   | 1397         | 69       | 3229         |
|  |  |  | ТОТ         |                      | ERIO                        |              |            |         |          |                   |              |          |              |
| 7:00 AM to 7:15 A                        | M 0 0  | 0 0  | 0 11        | 0 28                 | 0                           | 13           | 94         | 0       | 0        | 0                 | 146          | 4        | 296          |
| 7:15 AM to 7:30 A                        | M 0 0  | 0 0  | 0 5         | 0 25                 | 0                           | 18           | 109        | 0       | 0        | 0                 | 140          | 7        | 304          |
| 7:30 AM to 7:45 A                        |  | 0 0  | 0 13        | 0 36                 | 0                           | 19           | 176        | 0       | 0        | 0                 | 149          | 6        | 399          |
| 7:45 AM to 8:00 A                        |  | 0 1  | 0 22        | 0 24                 | 0                           | 21           | 279        | 0       | 0        | 0                 | 194          | 7        | 548          |
| 8:00 AM to 8:15 AM                       |  | 0 0  | 0 12        | 0 27                 | 1                           | 19           | 195        | 0       | 0        | 0                 | 225          | 10       | 489          |
| 8:15 AM to 8:30 Al<br>8:30 AM to 8:45 Al |  | 0 0 1  | 0 14<br>0 9 | 0 21<br>0 15         | 0                           | 29           | 137        | 0       | 0        | 0                 | 200          | 17       | 418          |
| 8:30 AM to 8:45 Al<br>8:45 AM to 9:00 Al |  | $\begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ | 0 9         | 0 15 0 18            | 0                           | 19<br>18     | 167<br>159 | 2       | 0        | 0                 | 188<br>155   | 11<br>7  | 412<br>363   |
| 0.1071H 10 7.00 A                        |  | . 0  |             |                      | OTAL                        |              | 10)        | Ü       | J        | Ü                 | 133          | ,        | 505          |
| 7:00 AM to 8:00 A                        | M 0 0  | 0 1  | 0 51        | 0 113                | 0                           | 71           | 658        | 0       | 0        | 0                 | 629          | 24       | 1547         |
| 7:15 AM to 8:15 A                        |  | 0 1  | 0 52        | 0 112                | 1                           | 77           | 759        | 0       | 0        | 0                 | 708          | 30       | 1740         |
| 7:30 AM to 8:30 A                        |  | 0 1  | 0 61        | 0 108                | 1                           | 88           | 787        | 0       | 0        | 0                 | 768          | 40       | 1854         |
| 7:45 AM to 8:45 A                        | M 0 0  | 0 2  | 0 57        | 0 87                 | 1                           | 88           | 778        | 2       | 0        | 0                 | 807          | 45       | 1867         |
| 8:00 AM to 9:00 A                        | M 0 0  | 0 1  | 0 41        | 0 81                 | 1                           | 85           | 658        | 2       | 0        | 0                 | 768          | 45       | 1682         |
|  |  | O.V.D.V.D.                                     | PEAK        |                      | UMMA                        |              | OFD.       |         |          | ****              |              |          |              |
| 7:45 AM to 8:45 AM                       |  | DUND<br>BT NBR                                 | SBU SBL     | HBOUND<br>SBT SBR    | EBU                         | EASTB<br>EBL |            | EBR     | WBU      | WEST              | BOUND<br>WBT | WBR      | TOTAL        |
| VOLUME                                   |  | 0 2  | 0 57        | 0 87                 | 1                           | 88<br>88     | 778        | 2       | 0        | 0<br>0            | 807          | 45       | 1867         |
| PHF BY MOVEMENT                          |  | .00 0.50                                       | 0.00 0.65   | 0.25                 |                             |              | 0.25       | 0.00    | 0.00     | 0.90              |              | OVERALL  |              |
| PHF BY APPROACH                          |  |  |             |                      |                             | 0.72         | !          |         |          | 0.9               |              |          | 0.85         |
| BICYCLE                                  | BICYCLE         0         0           PEDESTRIAN         1         3 |  |             |                      | 1 2                         |              |            |         |          |                   | 29           |          |              |
| PEDESTRIAN 1 3  N-LEG S-LEG              |  |  |             | 11 14<br>E-LEG W-LEG |                             |              |            |         |          | 29                |              |          |              |
| PEDESTRIAN BY LEG                        |  |  |             | 1                    |                             | 4            | -          |         |          | 0                 |              |          | 29           |
|  | TE   | EL: (510) 23                                   | 2 - 1271    | EMAIL                | BAYMI                       | ETRICS       | @GMA       | IL.C    | OM       |                   |              |          | -            |
|  |  | ·  |             |                      |                             |              | _          |         |          |                   |              |          |              |

# B.A.Y.M.E.T.R.I.C.S. BICYCLE TURNING MOVEMENT SUMMARY FFIC COUNTS IN CASTRO VALLEY SURVEY DATE: 1/31/2017 DAY: TUESDAY

| PROJECT:   |            | TRAFFI | C COU   | NTS IN   | CASTR | O VAL      | LEY  |      | SURVE  | Y DAT    | E: | 1     | /31/2017 | 7      | DAY:  | TUESE  | OAY   |       |
|--|------------|--------|---------|--|-------|------------|------|------|--------|----------|----|-------|----------|--------|-------|--------|-------|-------|
| N-S APPROA   | CH:        | WISTEI | RIA STI | REET   |       |            |      |      | SURVE  | Y TIMI   | Е: | ,     | 7:00 AM  | 1      | TO    | 9:00   | ) AM  |       |
| E-W APPROA   | ACH:       | CASTRO | O VALI  | LEY BO   | ULEVA | RD         |      |      | JURISI | DICTIO   | N: | CASTR | O VALI   | LEY    | FILE: | 370100 | 5-1AM |       |
| PEAK HOUR 7:45 AM to 8:45 AM  0 0 0 0 0  TOTAL N-END  0 0 0 0  TOTAL E-END  3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |            |        |         |  |       |            |      |      |        |          |    |       |          |        |       |        |       |       |
|  |            |        |         |  |       |            |      |      |        |          |    |       |          |        |       |        |       |       |
| From   | To         | U-TURN | LEFT    | THRU   |       | I I-TI IRN | LEFT | THRU | _      | IJ-TIIRN | 1  | THRU  |          | U-TURN | LEFT  | THRU   | RIGHT | IOIAL |
| From To U-TURN LEFT THRU RIGHT U-TURN LEFT TH |            |        |         |  |       |            |      |      |        |          |    |       |          |        |       |        |       |       |
| 7:00 AM to   | 7:15 AM    | 0      | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 0      | 0     | 0     |
| 7:15 AM to   | 7:30 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 0      | 0     | 1     |
| 7:30 AM to   | 7:45 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 0      | 0     | 1     |
| 7:45 AM to   | 8:00 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 8:00 AM to   | 8:15 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 8:15 AM to   | 8:30 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 2     | 0        | 0      | 0     | 1      | 0     | 3     |
| 8:30 AM to   | 8:45 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 2     | 0        | 0      | 0     | 2      | 0     | 4     |
| 8:45 AM to   | 9:00 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 2     | 0        | 0      | 0     | 2      | 0     | 4     |
|  | 2.00 11111 | , ,    |         | •  |       |            | TOTA |      |        | ERI      |    |       |          |        | •     |        |       |       |
| 7:00 AM to   | 7:15 AM    | 0      | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 0      | 0     | 0     |
| 7:15 AM to   | 7:30 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 0      | 0     | 1     |
| 7:30 AM to   | 7:45 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 0      | 0     | 0     |
| 7:45 AM to   | 8:00 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 1      | 0     | 1     |
| 8:00 AM to   | 8:15 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 0      | 0     | 0     |
| 8:15 AM to   | 8:30 AM    | -      | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 0      | 0     | 1     |
| 8:30 AM to   | 8:45 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 1      | 0     | 1     |
| 8:45 AM to   | 9:00 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 0     | 0        | 0      | 0     | 0      | 0     | 0     |
| 5.1512111 10   | ).00 / HVI | Ÿ      | ~       | <u>,                                      </u> | ,     |            | HOU  |      |        | OTAI     |    | -     | ,        | ,      | v     | V      |       | . ,   |
| 7:00 AM to   | 8:00 AM    | 0      | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 7:15 AM to   | 8:15 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 7:30 AM to   | 8:30 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 7:45 AM to   | 8:45 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 2      | 0     | 3     |
| 8:00 AM to   | 9:00 AM    |        | 0       | 0  | 0     | 0          | 0    | 0    | 0      | 0        | 0  | 1     | 0        | 0      | 0     | 1      | 0     | 2     |
| 0.00 AM 10   | 7.00 AW    | U      | U       |  |       |            |      |      |        |          |    |       |          |        | U     | 1      |       |       |
| TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.CON  |            |        |         |  |       |            |      |      |        |          |    |       |          |        |       |        |       |       |

| 7:45 AM to 8:45 AM |    |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 0  | 1  | 2  | 3     |

# B.A.Y.M.E.T.R.I.C.S. PEDESTRIAN MOVEMENT SUMMARY

| NSA PROACH:   NSTERIA STREET   JUNE NOW   NOW | PROJECT:  |               | TRAFFIC C                                      | COUNTS IN  | CASTRO V | ALLEY  |        |  | SURVEY D            | ATE:          | 1/31/2017                               |                  |
|---|-----------|---------------|--|------------|----------|--------|--------|--|---------------------|---------------|---|------------------|
| PEAK HOUR   | N-S APPRO | OACH:         | WISTERIA                                       | STREET     |          |        |        |  | DAY:                |               | TUESDAY                                 |                  |
| PEAK HOUR  07:45 AM  10  08:45 AM  11  11  11  11  11  11  11  11  12  13  11  11   |           |               |  |            |          |        |        |  |                     | ΓΙΟN:         |   |                  |
| TOTAL PEDESTRIAN VOLUMES   29   N. LEG   A. &B   14   | SURVEY P  | ERIOD:        | 7:00   | AM         | ТО       | 9:0    | 0 AM   |  | FILE:               |               | 3701005-1A                              | M                |
| TIME PERIOD NORTH X-WALK EAST X-WALK SOUTH X-WALK WEST X-WALK  From To A B C D E F G H TOTAL  SUR V E Y D A T A  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 14  07:30 AM 07:45 AM 4 7 2 6 1 1 2 0 0 0 22  07:45 AM 08:30 AM 5 10 15 5 7 7 7 7 0 0 0 51  08:45 AM 08:30 AM 10 15 5 8 8 8 9 0 0 0 64  TOTAL B Y PERIOD  TOTAL B Y PERIOD  TOTAL B Y PERIOD  07:15 AM 07:30 AM 2 0 6 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |           | O H ALLEY BOU | 08:45 AM  0 G  LEVARD  6 5  CROSSWALK SIDEWALK | F WISTERIA | E        | 6<br>C |        | W-LEG<br>G8<br>BY LEG:<br>N-LEG<br>S-LEG | 11 E&F S-LEG  14 11 | RIAN VOLUM 29 | N-LEG A&B 14  BY DIRECT NB(D+G) SB(C+H) | E-LEG  ION:  1 3 |
| TIME PERIOD NORTH X-WALK EAST X-WALK SOUTH X-WALK From To A B C D E F G H TOTAL  SUR VEY DATA  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 9  07:15 AM 07:30 AM 2 6 2 2 1 1 0 0 0 0 14  07:30 AM 07:45 AM 4 7 2 6 6 1 2 0 0 0 22  07:45 AM 08:00 AM 4 8 2 6 6 3 5 0 0 33  08:15 AM 08:30 AM 7 13 3 6 5 5 5 0 0 0 39  08:30 AM 08:45 AM 10 15 5 5 7 7 7 7 7 0 0 0 51  08:45 AM 09:00 AM 13 21 5 8 8 8 9 0 0 0 64  TOTAL BY PERIOD  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 0 0 0  07:15 AM 08:00 AM 13 21 5 8 8 8 9 0 0 0 64  TOTAL BY PERIOD  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 9  07:15 AM 08:00 AM 13 21 5 8 8 8 9 0 0 0 64  TOTAL BY PERIOD  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 0 9  07:15 AM 08:00 AM 2 1 0 0 0 1 1 1 1 0 0 0 5  08:00 AM 08:00 AM 0 1 0 0 0 0 0 0 0 8  07:45 AM 08:00 AM 0 1 0 0 0 0 0 0 0 8  08:00 AM 08:00 AM 0 1 0 0 0 0 0 0 0 0 6  08:00 AM 08:00 AM 0 1 0 0 0 0 0 0 0 0 6  08:00 AM 08:15 AM 1 0 2 0 0 0 1 1 1 2 0 0 0 12  08:45 AM 08:00 AM 0 1 1 0 0 0 0 0 0 0 0 6  08:00 AM 08:15 AM 1 2 0 0 0 2 0 0 0 12  08:45 AM 08:00 AM 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  |           | _             |  | ROL LINE   |          |        |        |  |                     |               |   |                  |
| From To A B C D E F G H TOTAL  SURVEY DATA  07:05 AM 07:15 AM 0 6 2 1 0 0 0 0 0 9  07:15 AM 07:30 AM 2 6 2 6 1 2 0 0 0 22  07:45 AM 08:00 AM 4 8 2 6 5 5 5 0 0 0 39  08:30 AM 08:45 AM 10 15 5 7 7 7 7 0 0 0 51  08:45 AM 09:00 AM 13 21 5 8 8 9 9 0 0 64  TOTAL BY PERIOD  07:00 AM 07:45 AM 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |           |               | STOP   |            |          |        |        | W-LEG                                    | 0                   | ]             | WR(B+E)                                 | 14               |
| From To A B C D E F G H TOTAL  SURVEY DATA  07:05 AM 07:15 AM 0 6 2 1 0 0 0 0 0 9  07:15 AM 07:30 AM 2 6 2 6 1 2 0 0 0 22  07:45 AM 08:00 AM 4 8 2 6 5 5 5 0 0 0 39  08:30 AM 08:45 AM 10 15 5 7 7 7 7 0 0 0 51  08:45 AM 09:00 AM 13 21 5 8 8 9 9 0 0 6  07:15 AM 07:45 AM 2 1 0 0 0 1 1 1 0 0 0 6  07:00 AM 07:45 AM 10 15 5 7 7 7 7 0 0 0 51  08:45 AM 08:00 AM 10 15 5 8 8 8 9 0 0 0 64  TOTAL BY PERIOD  07:00 AM 07:45 AM 2 1 0 0 0 1 1 1 1 0 0 0 5  07:30 AM 08:00 AM 2 1 0 0 0 1 1 1 0 0 0 5  07:30 AM 08:00 AM 2 1 0 0 0 1 1 1 0 0 0 0 5  07:30 AM 08:00 AM 0 1 0 0 0 0 0 0 0 0 6  08:00 AM 08:00 AM 0 1 0 1 0 0 0 0 0 0 0 6  08:00 AM 08:00 AM 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | T         | ME PERI       | IOD  | NORTH      | X-WALK   | EAST 2 | X-WALK | SOUT                                     | H X-WALK            | WEST 2        | K-WALK                                  |                  |
| 07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 9 07:15 AM 07:30 AM 2 6 2 6 2 2 1 1 1 0 0 0 14 07:30 AM 07:45 AM 4 7 2 6 1 1 2 0 0 0 22 07:45 AM 08:00 AM 4 8 2 6 3 5 0 0 28 08:00 AM 08:15 AM 5 10 2 6 5 5 0 0 0 39 08:30 AM 08:30 AM 7 13 3 3 6 5 5 0 0 39 08:30 AM 08:45 AM 10 15 5 7 7 7 7 0 0 0 51 08:45 AM 09:00 AM 13 21 5 8 8 9 0 0 64  TOTAL BY PERIOD  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 0 0 0 64  TOTAL BY PERIOD  07:30 AM 07:30 AM 2 0 0 0 1 1 1 1 0 0 0 5 07:30 AM 08:30 AM 0 1 0 0 5 5 07:30 AM 08:30 AM 0 1 1 0 0 0 2 3 0 0 6 08:00 AM 08:45 AM 1 1 2 0 0 0 0 1 1 1 0 0 0 5 08:30 AM 08:30 AM 2 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | -         |               |  |            |          |        |        |  |                     |               |   | TOTAL            |
| 07:15 AM          07:30 AM         2         6         2         2         1         1         0         0         14           07:30 AM          07:45 AM         4         7         2         6         1         2         0         0         22           07:45 AM          08:00 AM         4         8         2         6         3         5         0         0         28           08:00 AM          08:15 AM         5         10         2         6         5         5         0         0         33           08:15 AM          08:30 AM         7         13         3         6         5         5         0         0         39           08:30 AM          08:45 AM         10         15         5         7         7         7         0         0         5         9         0         0         64           TOTA L         B Y         P E R I O D         0         0         0         9         0         0         0         9         0         0         0         9         0         0         1  |           |               |  |            | S        | URVE   | Y DAT. | A  |                     |               |   |                  |
| 07:30 AM          07:45 AM         4         7         2         6         1         2         0         0         22           07:45 AM          08:00 AM         4         8         2         6         3         5         0         0         28           08:00 AM          08:15 AM         5         10         2         6         5         5         0         0         33           08:15 AM          08:45 AM         10         15         5         7         7         7         0         0         51           08:45 AM          09:00 AM         13         21         5         8         8         9         0         0         64           TOTAL BY PERIOD           07:00 AM          07:15 AM         0         6         2         1         0         0         0         9           07:15 AM          07:15 AM         2         0         0         1         1         1         0         0         9           07:30 AM          07:45 AM         2         1         0         <   | 07:00 AM  |               | 07:15 AM                                       | 0          | 6        | 2      | 1      | 0  | 0                   | 0             | 0                                       | 9                |
| 07:45 AM          08:00 AM         4         8         2         6         3         5         0         0         28           08:00 AM          08:15 AM         5         10         2         6         5         5         0         0         33           08:15 AM          08:30 AM         7         13         3         6         5         5         0         0         39           08:30 AM          08:45 AM         10         15         5         7         7         7         0         0         51           08:45 AM          09:00 AM         13         21         5         8         8         9         0         0         64           TOTA L BY PERIOD           07:00 AM          07:15 AM         0         6         2         1         0         0         0         9           07:15 AM          07:45 AM         2         1         0         4         0         1         0         0         5           07:30 AM          07:45 AM         2         1         0   | 07:15 AM  |               | 07:30 AM                                       | 2          | 6        | 2      | 2      | 1  | 1                   | 0             | 0                                       | 14               |
| 08:00 AM 08:15 AM 5 10 2 6 5 5 0 0 0 33 08:15 AM 08:30 AM 7 13 3 6 5 5 0 0 0 39 08:30 AM 08:45 AM 10 15 5 7 7 7 7 0 0 0 51 08:45 AM 09:00 AM 13 21 5 8 8 9 0 0 0 64  TOTAL BY PERIOD  07:00 AM 07:15 AM 0 6 2 1 0 0 0 0 9 07:15 AM 07:30 AM 2 0 0 1 1 1 0 0 0 5 07:30 AM 07:45 AM 2 1 0 0 4 0 1 0 0 5 07:45 AM 08:00 AM 1 2 0 0 0 0 2 3 0 0 6 08:00 AM 08:15 AM 1 2 0 0 0 0 2 3 0 0 6 08:30 AM 08:30 AM 2 3 1 0 0 0 6 08:30 AM 08:30 AM 2 3 1 0 0 0 0 0 0 0 0 08:30 AM 08:30 AM 3 2 2 2 1 2 2 2 0 0 0 12 08:45 AM 08:00 AM 4 8 2 2 6 3 5 0 0 12 07:00 AM 08:15 AM 5 4 0 5 5 5 5 0 0 24 07:15 AM 08:00 AM 5 7 1 4 4 4 4 4 0 0 0 25 07:30 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 24 07:30 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 24 07:30 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 22 07:30 AM 08:00 AM 6 8 3 3 1 6 5 5 5 0 0 0 22 07:30 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 22 08:00 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 22 08:00 AM 08:15 AM 5 4 0 5 5 5 5 0 0 0 22 08:00 AM 08:15 AM 6 8 8 3 1 6 6 5 0 0 0 29 08:00 AM 08:00 AM 9 13 3 2 5 5 4 0 0 0 29   | 07:30 AM  |               | 07:45 AM                                       | 4          | 7        | 2      | 6      | 1  | 2                   | 0             | 0                                       | 22               |
| 08:15 AM          08:30 AM         7         13         3         6         5         5         0         0         39           08:30 AM          08:45 AM         10         15         5         7         7         7         0         0         51           08:45 AM          09:00 AM         13         21         5         8         8         9         0         0         64           TOTAL BY PERIOD  |           |               |  |            |          |        |        |  |                     |               |   |                  |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 1     | 3     | 11    | 14    | 29    |
| VOLUME BY I | LEG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 14    | 11    | 4     | 0     | 29    |

| PRINCE   CASTRO VALLEY BOULEVARD   JURISDICTION:   CASTRO VALLEY   FILE: 3701008-IPM   | PROJECT:           | TRAFFIC COUNTS IN CAST | RO VALLEY SURVE                         | EY DATE: 1/31/20       | 17 DAY: TUESDAY        |         |  |  |
|--|--------------------|------------------------|---|------------------------|------------------------|---------|--|--|
| PEAK HOUR  | N-S APPROACH:      | WISTERIA STREET        |   |                        |                        |         |  |  |
| AGE   FORT   10  | E-W APPROACH:      | CASTRO VALLEY BOULEVA  | ARD JURISI                              | DICTION: CASTRO VAI    | LLEY FILE: 3701005-1PM |         |  |  |
| ASTRO VALLEY BOULEVARD    149  |                    |                        | NORTH                                   | ARRIVAL /              | DEPARTURE VOLUMES      |         |  |  |
| TIME   |                    |                        |   | PHF = 0.67             |                        |         |  |  |
| TIME   |                    |                        | <b>U</b> L                              | 94                     | 209                    |         |  |  |
| ASTRO VALEY BOULEVARD    Note   Section   Note   Section   Note   Section   Note   Section   Note    | 0                  |                        | 60                                      |                        | <b>*</b>               |         |  |  |
| ASTRO VALEY BOULEVARD  | 149                | 2372                   | 710                                     | 755                    | 770                    |         |  |  |
| ASTRO VALLEY BOLLEVARD    PRIOD   NONTHBOUND   SOUTHBOUND   FUND   LEFT   THRU   RIGHT   CTUMN   | 1353               |                        | 0                                       |                        |                        |         |  |  |
| TIME   | 0                  | ¬                      | 0                                       |                        | 1 1                    |         |  |  |
| Parior       | CASTRO VALLEY BOU  | ILEVARD                |   |                        |                        |         |  |  |
| This   Period   Pe    |                    | 0 2 0                  |   | 0                      | 6                      |         |  |  |
| To   To   To   To   To   To   To   To  |                    |                        | <u> </u>                                |                        | PHF = 0.50             |         |  |  |
|  | TIME PERIOD        | NORTHBOUND             | SOUTHBOUND                              | EASTBOUND              | WESTBOUND              | TOTAL   |  |  |
| Hole      | From To            | U-TURN LEFT THRU RIGHT |   | U-TURN LEFT THRU RIGHT | U-TURN LEFT THRU RIGHT |         |  |  |
| 4:15 PM  |                    |                        | SURVEY                                  | D A T A                |                        |         |  |  |
| 4.45 PM 10   |                    |                        |   |                        |                        |         |  |  |
| 4.45 PM  |                    |                        |   |                        |                        |         |  |  |
| Solic pm   10  |                    |                        |   |                        |                        |         |  |  |
| Storm   Stor   |                    |                        |   |                        |                        |         |  |  |
| 5.45 PM   10   5.45 PM   10   6.00 PM   2   3   5   5   11   103   303   24c   126   138   198   40.85   45.95   148   124   124     |                    |                        |   |                        |                        |         |  |  |
| 5.45 PM   10   6.00 PM   13   5   111   103   303   2426   1484   124   4589   1400 PM   1400    |                    |                        |   |                        |                        |         |  |  |
| ## Property  |                    |                        | 111 103                                 | 303 2426               | 1484 124               | 4559    |  |  |
| 4:15 PM to 4:30 PM to 4:30 PM 0 0 0 0 0 1 0 0 10 0 0 8 0 38 304 0 0 0 0 159 14 534 4:30 PM to 4:45 PM to 5:00 PM 0 1 0 1 0 0 10 0 17 0 0 15 0 34 331 0 0 0 0 180 16 601 4:45 PM to 5:00 PM to 5:15 PM to 5:15 PM to 5:15 PM to 5:30 PM  |                    |                        | TOTAL BY I                              | PERIOD                 |                        |         |  |  |
| ## ## ## ## ## ## ## ## ## ## ## ## ##   | 4:00 PM to 4:15 PM | 0 0 0 0                | 0 11 0 9                                | 0 46 367 0             | 0 0 181 16             | 630     |  |  |
| 4:45 PM to 5:00 PM to 5:00 PM to 5:05 PM to 5:15 PM to 5:30 PM to 5:30 PM to 5:30 PM to 5:30 PM to 5:45 PM to  | 4:15 PM to 4:30 PM | 0 0 0 1                | 0 10 0 8                                | 0 38 304 0             | 0 0 159 14             | 534     |  |  |
| Storm   Stor   |                    |                        |   | 0 31 351 0             |                        | 601     |  |  |
| 5:15 PM to 5:30 PM 0 0 0 0 0 0 0 0 12 0 13 0 39 269 0 0 0 0 190 18 541 5:30 PM to 5:45 PM 0 0 0 0 0 0 0 0 16 0 18 0 18 0 37 263 0 0 0 0 170 18 5545 PM 5:45 PM to 6:00 PM 0 0 0 0 0 0 0 15 0 15 0 37 263 0 0 0 0 170 15 521  |                    |                        |   |                        |                        |         |  |  |
| 5:30 PM to 5:45 PM 0 0 0 0 0 0 0 16 0 18 0 18 0 43 261 0 0 0 0 219 21 578 5:45 PM to 6:00 PM 0 0 0 0 0 15 0 15 0 37 263 0 0 0 0 176 15 521  ### Column 1   |                    |                        |   |                        |                        |         |  |  |
| Substitution   Subs   |                    |                        |   |                        |                        |         |  |  |
| HOURLY   TOTALS  |                    |                        |   |                        |                        |         |  |  |
| 4:00 PM   10   5:00 PM   0   2   0   4   0   51   0   43   0   149   1353   0   0   0   0   710   60   2372     4:15 PM   10   5:15 PM   0   3   0   5   0   57   0   48   0   138   1266   0   0   0   0   718   54   2289     4:30 PM   10   5:30 PM   0   3   0   4   0   59   0   53   0   139   1231   0   0   0   0   749   58   2296     4:45 PM   10   5:45 PM   0   2   0   3   0   65   0   60   0   151   1141   0   0   0   0   774   64   2187     5:00 PM   10   5:00 PM   0   1   0   1   0   60   0   60   0   154   1073   0   0   0   774   64   2187     5:00 PM   10   5:00 PM   0   1   0   1   0   60   0   60   0   154   1073   0   0   0   774   64   2187     5:00 PM   10   5:00 PM   0   1   0   1   0   58   580    | 0.0011             |                        | *************************************** |                        | 1 2 1,0 13             |         |  |  |
| 4:15 PM to 5:15 PM 0 3 0 5 0 57 0 48 0 138 1266 0 0 0 718 54 2289  4:30 PM to 5:30 PM 0 3 0 4 0 59 0 53 0 139 1231 0 0 0 749 58 2296  4:45 PM to 5:45 PM 0 2 0 3 0 65 0 60 0 151 1141 0 0 0 788 63 2273  5:00 PM to 5:00 PM 0 1 0 1 0 1 0 60 0 60 0 151 1141 0 0 0 774 64 2187  5:00 PM to 5:00 PM TO 1 0 1 0 0 1 0 60 0 154 1073 0 0 0 0 774 64 2187  5:00 PM to 5:00 PM TO 1 0 1 0 0 1 0 60 0 0 60 0 154 1073 0 0 0 0 774 64 2187  5:00 PM to 5:00 PM NBU NBL NBT NBR SBU SBL SBT SBR EBU EBL EBT EBR WBU WBL WBT WBT  PHF BY MOVEMENT 0.00 0.50 0.00 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.00 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.50 0.00 0.64 0.00 0.72 0.00 0.81 0.92 0.00 0.00 0.00 0.93 0.94 0VERALL PHF BY APPROACH 0.50 0.50 0.50 0.50 0.50 0.67 0.67 0.67 0.91 0.91 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94   | 4:00 PM to 5:00 PM | 1 0 2 0 4              |   |                        | 0 0 710 60             | 2372    |  |  |
| 4:45 PM to 5:45 PM 0 2 0 3 0 65 0 60 0 151 1141 0 0 0 0 788 63 2273 5:00 PM to 6:00 PM 0 1 0 1 0 1 0 60 0 60 0 154 1073 0 0 0 0 774 64 2187  E:00 PM to 5:00 PM to 5: | 4:15 PM to 5:15 PM | 1 0 3 0 5              | 0 57 0 48                               | 0 138 1266 0           | 0 0 718 54             | 2289    |  |  |
| SOO PM   to   6:00 PM   0  | 4:30 PM to 5:30 PM | 0 3 0 4                | 0 59 0 53                               | 0 139 1231 0           | 0 0 749 58             | 2296    |  |  |
| PEAK HOUR SUMMARY   SUMARY   SUMMARY   SUMMARY   SUMARY    | 4:45 PM to 5:45 PM | 0 2 0 3                | 0 65 0 60                               | 0 151 1141 0           | 0 0 788 63             | 2273    |  |  |
| NORTHEOLINE   NORTHEOLINE   SOUTHEOLINE   SOUTHEOLINE   SUBSTEAM BY LEG:   NORTHEOLINE   NORTHEOLINE   SOUTHEOLINE   SOUTHEOLI   | 5:00 PM to 6:00 PM | 1 0 1 0 1              |   |                        | 0 0 774 64             | 2187    |  |  |
| NBU         NBL         NBT         NBR         SBU         SBL         SBT         SBR         EBU         EBL         EBT         EBR         WBU         WBL         WBT         WBR           VOLUME         0         2         0         4         0         51         0         43         0         149         1353         0         0         0         710         60         2372           PHF BY MOVEMENT         0.00         0.50         0.00         0.60         0.00         0.64         0.00         0.72         0.00         0.81         0.92         0.00         0.00         0.00         0.93         0.94         0VERALE           PHF BY APPROACH         0         0.5         0         0.67         0.67         0         0.91         0.00         0.00         0.00         0.93         0.94         0VERALE           BICYCLE         0         0         0         0         0         0         0         0         0         0.94         0.94         0.94           PEDESTRIAN         0         0         0         0         0         0         0         0         0         0         0         0  | 4.00 PM            | MODERNOVA              |   |                        | Anadam Cana            | mom:-   |  |  |
| VOLUME         0         2         0         4         0         51         0         43         0         149         1353         0         0         0         710         60         2372           PHF BY MOVEMENT         0.00         0.50         0.00         0.50         0.00         0.64         0.00         0.72         0.00         0.81         0.92         0.00         0.00         0.93         0.94         OVERALL           PHF BY APPROACH         0.50         0.50         0.67         0.67         0.91         0.91         0.94         0.94         0.94           BICYCLE         0.50         0.50         0.67         0.67         0.91         0.91         3         4         0.94           PEDESTRIAN         0.50         0.50         0.67         0.72         0.91         1         0.94         0.94         0.94           PEDESTRIAN         0.50         0.50         0.67         0.67         0.91         1         0.91         1         9.94         49           PEDESTRIAN BY LEG:         24         21         21         4         0         0.00         0.00         0.00         0.00         0.93         0.94<  | 4:00 PM to 5:00 PM |                        |   |                        |                        | TOTAL   |  |  |
| PHF BY MOVEMENT         0.00         0.50         0.00         0.50         0.00         0.64         0.00         0.72         0.00         0.81         0.92         0.00         0.00         0.93         0.94         OVERALL           PHF BY APPROACH         0.50         0.50         0.67         0.91         0.91         0.94         0.94         0.94           BICYCLE         0         0         0         1         3         4         4           PEDESTRIAN         N-LEG         S-LEG         E-LEG         W-LEG         W-LEG         49           PEDESTRIAN BY LEG:         24         21         4         0         0         0.00         0.93         0.94         OVERALL   | VOLUME             |                        |   |                        |                        | 2372    |  |  |
| BICYCLE         0         0         1         3         4           PEDESTRIAN         0         4         26         19         49           N-LEG         S-LEG         E-LEG         W-LEG           PEDESTRIAN BY LEG:         24         21         4         0         49  | PHF BY MOVEMENT    | 0.00 0.50 0.00 0.50    | 0.00 0.64 0.00 0.72                     | 0.00 0.81 0.92 0.00    | 0.00 0.00 0.93 0.94    | OVERALL |  |  |
| PEDESTRIAN         0         4         26         19         49           N-LEG         S-LEG         E-LEG         W-LEG           PEDESTRIAN BY LEG:         24         21         4         0         49  |                    |                        |   |                        |                        |         |  |  |
| N-LEG         S-LEG         E-LEG         W-LEG           PEDESTRIAN BY LEG:         24         21         4         0         49  |                    |                        |   |                        |                        |         |  |  |
| PEDESTRIAN BY LEG:         24         21         4         0         49  | FEDESTRIAN         |                        |   |                        |                        |         |  |  |
| TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.COM  | PEDESTRIAN BY LEG: |                        |   |                        |                        | 49      |  |  |
| · /  |                    | TEL: (510) 2           | 232 - 1271 EMAIL                        | : BAYMETRICS@GMAIL.C   | COM                    |         |  |  |

## BICYCLE TURNING MOVEMENT SUMMARY

| PROJECT:   |         | TRAFFI | C COU   | NTS IN | CASTR    | O VAL    | LEY |      | SURVE  | Y DAT   | E:     | 1     | 1/31/2017 | 7      | DAY:  | TUESI  | OAY   |       |
|--|---------|--------|---------|--------|----------|----------|-----|------|--------|---------|--------|-------|-----------|--------|-------|--------|-------|-------|
| N-S APPROA   | CH:     | WISTER | RIA STI | REET   |          |          |     |      | SURVE  | EY TIM  | E:     |       | 4:00 PM   | [      | TO    | 6:00   | ) PM  |       |
| E-W APPRO  | ACH:    | CASTRO | O VALI  | LEY BO | ULEVA    | RD       |     |      | JURISI | DICTIO  | N:     | CASTR | O VALI    | LEY    | FILE: | 370100 | 5-1PM |       |
| PEAK HOUR 4:00 PM to \$5:00 PM  0 0 0 0 0 0  8  TOTAL N-END 0  1 TOTAL E-END  4 3 3 4 3 3 4 3 3 4 4 3 4 4 3 4 4 4 4  |         |        |         |        |          |          |     |      |        |         |        |       |           |        |       |        |       |       |
|  |         |        |         |        |          |          |     |      |        |         |        |       |           |        |       |        |       |       |
|  | To      | U-TURN | LEFT    | THRU   |          | II TIIDN | 1   | THRU |        | II THDM | 1      | THRU  |           | U-TURN | LEFT  | THRU   | RIGHT | IOIAL |
| From To U-TURN LEFT THRU RIGHT U-TURN LEFT TH |         |        |         |        |          |          |     |      |        |         |        |       |           |        |       |        |       |       |
| 4:00 PM to   | 4:15 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 1      | 0     | 2     |
| 4:15 PM to   | 4:30 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 1      | 0     | 2     |
| 4:30 PM to   | 4:45 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 1      | 0     | 2     |
| 4:45 PM to   | 5:00 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 3      | 0     | 4     |
| 5:00 PM to   | 5:15 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 3      | 0     | 4     |
| 5:15 PM to   | 5:30 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 3      | 0     | 4     |
| 5:30 PM to   | 5:45 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 3      | 0     | 4     |
| 5:45 PM to   | 6:00 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 5      | 1     | 7     |
|  |         |        |         |        |          |          | TOT |      |        | ERI     |        |       |           |        |       |        |       |       |
| 4:00 PM to   | 4:15 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 1      | 0     | 2     |
| 4:15 PM to   | 4:30 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 0      | 0     | 0     |
| 4:30 PM to   | 4:45 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 0      | 0     | 0     |
| 4:45 PM to   | 5:00 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 0     | 2     |
| 5:00 PM to   | 5:15 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 0      | 0     | 0     |
| 5:15 PM to   | 5:30 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 0      | 0     | 0     |
| 5:30 PM to   | 5:45 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 0      | 0     | 0     |
| 5:45 PM to   | 6:00 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 1     | 3     |
|  |         |        |         |        |          |          |     | RLY  |        | OTAI    | LS     |       |           |        |       |        |       |       |
| 4:00 PM to   | 5:00 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 1     | 0         | 0      | 0     | 3      | 0     | 4     |
| 4:15 PM to   | 5:15 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 0     | 2     |
| 4:30 PM to   | 5:30 PM | 0      | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 0     | 2     |
| 4:45 PM to   | 5:45 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 0     | 2     |
| 5:00 PM to   | 6:00 PM |        | 0       | 0      | 0        | 0        | 0   | 0    | 0      | 0       | 0      | 0     | 0         | 0      | 0     | 2      | 1     | 3     |
|  |         | •      |         | TEL: ( | (510) 23 | 32 - 127 | 71  |      | EMAIL: | BAYN    | ИETRIC | CS@GM | IAIL.C    | ON     |       |        |       | •     |
| TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.CON  |         |        |         |        |          |          |     |      |        |         |        |       |           |        |       |        |       |       |

| 4:00 PM to 5:00 PM | ł  |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 0  | 1  | 3  | 4     |

### PEDESTRIAN MOVEMENT SUMMARY

| PROJECT   | :   | TRAFFIC (  | COUNTS IN     | CASTRO V   | ALLEY         |        | SURVEY DATE: 1/31/2017 |           |                       |                    |              |  |
|-----------|---|------------|---------------|------------|---------------|--------|------------------------|-----------|-----------------------|--------------------|--------------|--|
| N-S APPRO | OACH:   | WISTERIA   | STREET        |            |               |        |                        | DAY:      |                       | TUESDAY            |              |  |
| E-W APPR  | ROACH:  | CASTRO V   | ALLEY BO      | OULEVARD   |               |        |                        | JURISDIC' | ΓΙΟN:                 | CASTRO V           | ALLEY        |  |
| SURVEY F  | PERIOD:   | 4:00       | PM            | TO         | 6:0           | 0 PM   |                        | FILE:     |                       | 3701005-1P         | M            |  |
| 04:00 PM  | PEAK HOU TO  O H ALLEY BOU                      | 05:00 PM   | A             | B<br>→<br> | 12<br>12<br>C |        | W-LEG<br>G&            | H 0 1 E&F | AK HOUR RIAN VOLUM 49 | N-LEG<br>A&B<br>24 | C&D<br>E-LEG |  |
|           | LECEND.   |            | WICTEDIA      | CTDEET     |               |        | DV I EC.               | S-LEG     |                       | BY DIRECT          | ION.         |  |
|           | LEGEND:   | CROSSWALI  | WISTERIA<br>K | SIKELI     |               |        | BY LEG:<br>N-LEG       | 24        | 1                     | NB(D+G)            |              |  |
|           |   | SIDEWALK   |               |            |               |        | S-LEG                  | 21        |                       | SB(C+H)            |              |  |
|           | _   | STOP CONTI | ROL LINE      |            |               |        | E-LEG                  | 4         |                       | EB(A+F)            |              |  |
|           |   | STOP       |               |            |               |        | W-LEG                  | 0         | ]                     | WB(B+E)            | 19           |  |
| Т         | IME PERI  | OD         | NORTH         | X-WALK     | EAST          | X-WALK | SOUT                   | H X-WALK  | WEST                  | K-WALK             |              |  |
| From      | INL TER   | То         | A             | В          | C             | D      | E                      | F         | G                     | H                  | TOTAL        |  |
|           |   |            | l             | S          | URVE          | Y DAT  | A                      |           |                       |                    |              |  |
| 04:00 PM  |   | 04:15 PM   | 2             | 6          | 0             | 0      | 1                      | 1         | 0                     | 0                  | 10           |  |
| 04:15 PM  |   | 04:30 PM   | 6             | 10         | 2             | 0      | 2                      | 3         | 0                     | 0                  | 23           |  |
| 04:30 PM  |   | 04:45 PM   | 9             | 12         | 4             | 0      | 4                      | 9         | 0                     | 0                  | 38           |  |
| 04:45 PM  |   | 05:00 PM   | 12            | 12         | 4             | 0      | 7                      | 14        | 0                     | 0                  | 49           |  |
| 05:00 PM  |   | 05:15 PM   | 18            | 12         | 4             | 0      | 11                     | 15        | 0                     | 0                  | 60           |  |
| 05:15 PM  |   | 05:30 PM   | 19            | 18         | 6             | 0      | 14                     | 16        | 0                     | 0                  | 73           |  |
| 05:30 PM  |   | 05:45 PM   | 23            | 25         | 6             | 3      | 14                     | 19        | 0                     | 0                  | 90           |  |
| 05:45 PM  |   | 06:00 PM   | 24            | 30         | 6             | 3      | 18                     | 20        | 0                     | 0                  | 101          |  |
|           |   |            | -             | TOT        | ΓΑΙ Β         | Y PER  | IOD                    |           |                       |                    | -            |  |
| 04:00 PM  |   | 04:15 PM   | 2             | 6          | 0             | 0      | 1                      | 1         | 0                     | 0                  | 10           |  |
| 04:15 PM  |   | 04:30 PM   | 4             | 4          | 2             | 0      | 1                      | 2         | 0                     | 0                  | 13           |  |
| 04:30 PM  |   | 04:45 PM   | 3             | 2          | 2             | 0      | 2                      | 6         | 0                     | 0                  | 15           |  |
| 04:45 PM  |   | 05:00 PM   | 3             | 0          | 0             | 0      | 3                      | 5         | 0                     | 0                  | 11           |  |
| 05:00 PM  |   | 05:15 PM   | 6             | 0          | 0             | 0      | 4                      | 1         | 0                     | 0                  | 11           |  |
| 05:15 PM  |   | 05:30 PM   | 1             | 6          | 2             | 0      | 3                      | 1         | 0                     | 0                  | 13           |  |
| 05:30 PM  |   | 05:45 PM   | 4             | 7          | 0             | 3      | 0                      | 3         | 0                     | 0                  | 17           |  |
| 05:45 PM  |   | 06:00 PM   | 1             | 5          | 0             | 0      | 4                      | 1         | 0                     | 0                  | 11           |  |
|           |   |            |               | НО         | URLY          | TOTA   | LS                     |           | 1                     |                    |              |  |
| 04:00 PM  |   | 05:00 PM   | 12            | 12         | 4             | 0      | 7                      | 14        | 0                     | 0                  | 49           |  |
| 04:15 PM  |   | 05:15 PM   | 16            | 6          | 4             | 0      | 10                     | 14        | 0                     | 0                  | 50           |  |
| 04:30 PM  |   | 05:30 PM   | 13            | 8          | 4             | 0      | 12                     | 13        | 0                     | 0                  | 50           |  |
| 04:45 PM  |   | 05:45 PM   | 14            | 13         | 2             | 3      | 10                     | 10        | 0                     | 0                  | 52           |  |
| 05:00 PM  |   | 06:00 PM   | 12            | 18         | 2             | 3      | 11                     | 6         | 0                     | 0                  | 52           |  |
|           |   |            |               |            |               |        | 1                      |           |                       |                    |              |  |
|           | Tel: (510) 232-1271 EMAIL: BAYMETRICS@GMAIL.COM |            |               |            |               |        |                        |           |                       |                    |              |  |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 0     | 4     | 26    | 19    | 49    |
| VOLUME BY I | .EG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 24    | 21    | 4     | 0     | 49    |

| PROJECT: TRAFFIC COUNTS IN CASTRO VAL |  |                    |          |           | O VALI      |          |                      |             |            |            | 7         | DAY:     | TUESD         | AY         |          |        |            |       |            |
|---------------------------------------|--|--------------------|----------|-----------|-------------|----------|----------------------|-------------|------------|------------|-----------|----------|---------------|------------|----------|--------|------------|-------|------------|
| N-S APPR                              | COA  | CH:                | WISTE    | RIA ST    | REET        |          |                      |             |            | SURVE      | Y TIME:   | :        | ,             | 7:00 AM    | 1        | TO     | 9:00       | AM    |            |
| E-W APPI                              | ROA  | CH:                | CASTR    | O VAL     | LEY BO      | ULEVA    | RD                   |             |            | JURISI     | ICTION    | :        | CASTR         | O VAL      | LEY      | FILE:  | 3701005    | -2AM  |            |
| PEAI<br>7:45 AM                       |  | OUR<br>8:45 AM     |          | 0         | 0           | 0        |                      |             | †<br>NORTH |            |           |          | ARR           | RIVAL / 1  | DEPART   | URE VO | LUMES      |       |            |
|                                       |  |                    |          | 0         |             | 0        | 0                    |             |            |            |           | [        | PHF =         | 0.00       | ]        |        |            |       |            |
|                                       |  |                    |          |           | <b>↓</b>    | <b>L</b> | <u> </u>             |             | 1          |            |           |          |               | 0          | 1        |        |            |       |            |
|                                       |  | 0                  |          |           |             |          |                      | •           | 1          |            |           |          |               |            | <b>†</b> |        | PHF = 0.93 | •     |            |
|                                       |  | 0                  | _        |           | 17:         | 56       | 1                    | <b>←</b>    | 863        |            | Г         | 878      |               | +          | ı        | 4      | 880        | •     |            |
|                                       |  | 818                | <b>→</b> |           |             |          | 1                    | <b>←</b>    | 14         |            | _<br>     | 847      | `<br><b>→</b> |            |          |        | 834        |       |            |
|                                       |  | 29                 | ~        |           |             |          |                      | $\subseteq$ | 2          |            | _         | PHF =    |               | - 1        | 1        |        | 50.        |       |            |
| CASTRO V                              | VALI   | LEY BOUI           | EVARD    | $\bigcap$ |             | 1        |                      |             | 1          |            | E         | 0.70     |               | ţ          |          |        |            |       |            |
|                                       | 0 15 0 14  |                    |          |           |             |          |                      |             |            |            |           |          |               | 43         | 29       |        |            |       |            |
|                                       |  |                    |          |           | RIA STRE    |          |                      |             |            |            |           |          |               |            | PHF =    | 0.60   |            |       |            |
| TIME                                  | P  | ERIOD              |          | NORT      | HBOUN       | D        |                      | SOUT        | HBOUNI     | )          |           | EAST     | BOUND         | )          |          | WEST   | BOUND      | )     | TOTAL      |
| From                                  |  |                    | U-TURN   | LEFT      | THRU        |          | U-TURN               | LEFT        | THRU       | RIGHT      | U-TURN    | LEFT     | THRU          | RIGHT      | U-TURN   | LEFT   | THRU       | RIGHT | ]          |
|                                       |  |                    |          |           |             |          |                      | SU          | RVEY       | Y I        | АТА       |          |               |            |          |        |            |       | <u> </u>   |
| 7:00 AM                               | to   | 7:15 AM            |          | 9         | 0           | 1        |                      | 0           | 0          | 0          |           | 0        | 84            | 5          | 0        | 2      | 144        | 0     | 245        |
| 7:15 AM                               | to   | 7:30 AM            |          | 18        | 0           | 4        |                      | 0           | 0          | 0          |           | 0        | 198           | 8          | 0        | 4      | 272        | 0     | 504        |
| 7:30 AM                               | to   | 7:45 AM            |          | 24        | 0           | 9        |                      | 0           | 0          | 0          |           | 0        | 376           | 10         | 2        | 7      | 406        | 0     | 834        |
| 7:45 AM                               | to   | 8:00 AM            |          | 28        | 0           | 17       |                      | 0           | 0          | 0          |           | 0        | 670           | 19         | 2        | 9      | 618        | 0     | 1363       |
| 8:00 AM                               | to   | 8:15 AM            |          | 32        | 0           | 20       |                      | 0           | 0          | 0          |           | 0        | 874           | 29         | 4        | 16     | 846        | 0     | 1821       |
| 8:15 AM                               | to   | 8:30 AM            |          | 36        | 0           | 21       |                      | 0           | 0          | 0          |           | 0        | 1030          | 33         | 4        | 17     | 1067       | 1     | 2209       |
| 8:30 AM                               | to   | 8:45 AM            |          | 39        | 0           | 23       |                      | 0           | 0          | 0          |           | 0        | 1194          | 39         | 4        | 21     | 1269       | 1     | 2590       |
| 8:45 AM                               | to   | 9:00 AM            |          | 42        | 0           | 25       |                      | 0<br>T O T  | 0<br>A I D | 0          | EDIO      | 0        | 1357          | 46         | 5        | 23     | 1431       | 1     | 2930       |
|                                       |  |                    |          |           |             |          | 1                    | TOT.        |            |            | ERIO      |          |               |            |          |        |            |       |            |
|                                       | to   | 7:15 AM            | 0        | 9         | 0           | 1        | 0                    | 0           | 0          | 0          | 0         | 0        | 84            | 5          | 0        | 2      | 144        | 0     | 245        |
|                                       | to   | 7:30 AM            | 0        | 9         | 0           | 3        | 0                    | 0           | 0          | 0          | 0         | 0        | 114           | 3          | 0        | 2      | 128        | 0     | 259        |
|                                       | to   | 7:45 AM            | 0        | 6         | 0           | 5        | 0                    | 0           | 0          | 0          | 0         | 0        | 178           | 2          | 2        | 3      | 134        | 0     | 330        |
| 7:45 AM<br>8:00 AM                    | to   | 8:00 AM<br>8:15 AM | 0        | 4         | 0           | 3        | 0                    | 0           | 0          | 0          | 0         | 0        | 294           | 9          | 0 2      | 7      | 212        | 0     | 529<br>458 |
|                                       | to   | 8:30 AM            | 0        | 4         | 0           | 1        | 0                    | 0           | 0          | 0          | 0         | 0        | 156           | 4          | 0        | 1      | 228        | 1     | 388        |
| 8:30 AM                               | to   | 8:45 AM            | 0        | 3         | 0           | 2        | 0                    | 0           | 0          | 0          | 0         | 0        | 164           | 6          | 0        | 4      | 202        | 0     | 381        |
|                                       | to   | 9:00 AM            | 0        | 3         | 0           | 2        | 0                    | 0           | 0          | 0          | 0         | 0        | 163           | 7          | 1        | 2      | 162        | 0     | 340        |
|                                       |  | ,,,,,              |          |           |             |          | <u> </u>             | ** * *      | JRLY       |            | OTAL      | ~        | - 33          |            |          |        |            |       |            |
| 7:00 AM                               | to   | 8:00 AM            | 0        | 28        | 0           | 17       | 0                    | 0           | 0          | 0          | 0         | 0        | 670           | 19         | 2        | 9      | 618        | 0     | 1363       |
| 7:15 AM                               |  | 8:15 AM            | 0        | 23        | 0           | 19       | 0                    | 0           | 0          | 0          | 0         | 0        | 790           | 24         | 4        | 14     | 702        | 0     | 1576       |
| 7:30 AM                               |  | 8:30 AM            |          | 18        | 0           | 17       | 0                    | 0           | 0          | 0          | 0         | 0        | 832           | 25         | 4        | 13     | 795        | 1     | 1705       |
| 7:45 AM                               | to   | 8:45 AM            | 0        | 15        | 0           | 14       | 0                    | 0           | 0          | 0          | 0         | 0        | 818           | 29         | 2        | 14     | 863        | 1     | 1756       |
| 8:00 AM                               | to   | 9:00 AM            | 0        | 14        | 0           | 8        | 0                    | 0           | 0          | 0          | 0         | 0        | 687           | 27         | 3        | 14     | 813        | 1     | 1567       |
|                                       |  |                    |          |           |             |          | PΕ                   | AK          | HOU        | R S        | U M M A   |          |               |            |          |        |            |       |            |
| 7:45 AM                               | to   | 8:45 AM            |          |           | HBOUN       |          |                      |             | HBOUNI     |            |           |          | BOUND         |            |          |        | BOUND      |       | TOTAL      |
| 170                                   | NBU         NBL         NBT         NBR         SBU           VOLUME         0         15         0         14         0 |                    |          |           | SBL<br>0    | SBT<br>0 | SBR<br>0             | EBU<br>0    | EBL<br>0   | EBT<br>818 | EBR<br>29 | WBU<br>2 | WBL<br>14     | WBT<br>863 | WBR      | 1756   |            |       |            |
| PHF BY N                              |  |                    | 0.00     | 0.94      | 0.00        | 0.44     | 0.00                 | 0.00        | 0.00       | 0.00       | 0.00      | 0.00     | 0.70          | 0.73       | 0.25     | 0.50   | 0.95       | 0.25  | OVERALL    |
| PHF BY APPROACH 0.60                  |  |                    |          | 2.00      |             | .00      |                      | 2.20        | 0.7        |            | ,-        |          | 0.50          |            |          | 0.83   |            |       |            |
| BICYCLE 0                             |  |                    |          |           |             | 0        |                      |             | 1          |            |           |          | 2             |            |          | 3      |            |       |            |
| PEDESTRIAN 0 N-LEG                    |  |                    |          | 1         |             | 14       |                      |             |            |            |           | 22       |               |            |          |        |            |       |            |
| PEDESTR                               | IAN  | BY LEG-            |          |           | L <b>EG</b> |          |                      |             | EG<br>6    |            |           | E-L1     | EG            |            |          | W-I    | LEG        |       | 22         |
| FEDESIK                               | IMIN   | DI LEU:            |          |           |             | 510) 23  | <u>I</u><br>32 _ 127 |             |            | MAII ·     | BAVM      | ETRIC    | S@GM          | IAIL C     | OM       | (      | ,          |       | 44         |
| L                                     | TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.COM  |                    |          |           |             |          |                      |             |            |            |           |          |               |            |          |        |            |       |            |

# BICYCLE TURNING MOVEMENT SUMMARY FFIC COUNTS IN CASTRO VALLEY SURVEY DATE: 1/31/2017 DAY: TUESDAY

| PROJECT: TRAFFIC COUNTS IN CASTRO VALLEY N-S APPROACH: WISTERIA STREET |  |        |        |          |       |          |      |      | SURVEY DATE: 1/31/2017 DAY: TUESDAY |         |    |          |         |        |       |        |       |   |
|--|--|--------|--------|----------|-------|----------|------|------|-------------------------------------|---------|----|----------|---------|--------|-------|--------|-------|---|
| N-S APPRO  |  |        |        |          |       |          |      |      | SURVE                               |         |    |          | 7:00 AM |        | TO    | 9:00   | AM    |   |
| E-W APPRO  | OACH:  | CASTRO | ) VALI | EY BOU   | ULEVA | RD       |      |      | JURISI                              | DICTIO  | N: | CASTR    | O VALI  | LEY    | FILE: | 370100 | 5-2AM |   |
| 7:45 AM to   | 0 0 0 0 0 0 0 TOTAL N-END 0 TOTAL E-END 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0            |        |        |          |       |          |      |      |                                     |         |    |          |         |        |       |        |       |   |
| TIME   | WISTERIA STREET TOTAL S-END 1  TIME PERIOD NORTHBOUND SOUTHBOUND EASTBOUND WESTBOUND TOTAL |        |        |          |       |          |      |      |                                     |         |    |          |         |        |       |        |       |   |
| From   | То   | U-TURN | LEFT   | THRU     |       | U-TURN   | LEFT | THRU |                                     | U-TURN  | 1  | THRU     |         | U-TURN | LEFT  | THRU   | RIGHT |   |
|  |  |        |        |          |       |          |      | RVE  |                                     | O A T A |    |          |         |        | l     |        |       |   |
| 7:00 AM to   | o 7:15 AM  | 0      | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 0      | 0     | 0 |
| 7:15 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 0       | 0      | 0     | 0      | 0     | 1 |
| 7:30 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 0       | 0      | 0     | 0      | 0     | 1 |
| 7:45 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 0       | 0      | 0     | 1      | 0     | 2 |
| 8:00 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 0       | 0      | 0     | 1      | 0     | 2 |
| 8:15 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 1       | 0      | 0     | 1      | 0     | 3 |
| 8:30 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 1       | 0      | 0     | 2      | 0     | 4 |
| 8:45 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 1       | 0      | 0     | 2      | 0     | 4 |
|  |  |        |        |          |       |          | ТОТ  |      |                                     | ERI     |    |          |         |        |       |        |       |   |
| 7:00 AM to   | o 7:15 AM  | 0      | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 0      | 0     | 0 |
| 7:15 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 1        | 0       | 0      | 0     | 0      | 0     | 1 |
| 7:30 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 0      | 0     | 0 |
| 7:45 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 1      | 0     | 1 |
| 8:00 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 0      | 0     | 0 |
| 8:15 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 1       | 0      | 0     | 0      | 0     | 1 |
| 8:30 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 1      | 0     | 1 |
| 8:45 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 0       | 0      | 0     | 0      | 0     | 0 |
| 0.1071111  | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   | . ,    | •      | <u> </u> | ,     | ý        |      |      |                                     | OTAI    |    |          | ,       |        | v     | -      |       | , |
| 7:00 AM to   |  |        |        |          |       |          |      |      |                                     |         |    |          |         |        |       |        |       |   |
| 7:15 AM to 8:15 AM 0 0 0 0 0 0 0 0 0 0 0 0 0 2                         |  |        |        |          |       |          |      |      |                                     |         |    |          |         |        |       |        |       |   |
| 7:30 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 1       | 0      | 0     | 1      | 0     | 2 |
| 7:45 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 1       | 0      | 0     | 2      | 0     | 3 |
| 8:00 AM to   |  |        | 0      | 0        | 0     | 0        | 0    | 0    | 0                                   | 0       | 0  | 0        | 1       | 0      | 0     | 1      | 0     | 2 |
| 0.00 AIVI II   | 7.00 AIVI  | U      |        |          |       | 32 - 127 |      |      | EMAIL:                              |         |    |          |         |        | 0     | 1      | U     |   |
| L  |  |        |        | . (      | ,     |          |      |      |                                     |         |    | <u> </u> |         |        |       |        |       |   |

| 7:45 AM to 8:45 AM |    |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 0  | 1  | 2  | 3     |

# B.A.Y.M.E.T.R.I.C.S. PEDESTRIAN MOVEMENT SUMMARY

| E-W APPROACH: C<br>SURVEY PERIOD: | VISTERIA S<br>ASTRO VA<br>7:00 A<br>08:45 AM | LLEY BOUL     | EVARD<br>TO | 9:00 A   | M              |                                  | DAY:<br>JURISDICT | ΓΙΟN:     | TUESDAY<br>CASTRO V<br>3701005-2A |                      |
|-----------------------------------|--|---------------|-------------|----------|----------------|----------------------------------|-------------------|-----------|-----------------------------------|----------------------|
| SURVEY PERIOD:  PEAK HOUR         | 7:00 A                                       |               |             | 9:00 A   | M              |                                  |                   |           |                                   |                      |
| PEAK HOUR                         |  | AM            | то          | 9:00 A   | M              |                                  | FILE:             |           | 3701005-2A                        | M                    |
|                                   | 08:45 AM                                     |               |             |          |                |                                  |                   |           |                                   | IVI                  |
| CASTRO VALLEY BOULE  LEGEND:      | VARD [] 1 5                                  | VISTERIA STR  | E           | 6 9 C*   | ↑ <sub>D</sub> | W-LEG<br>G&l<br>BY LEG:<br>N-LEG | AL PEDESTR        | 22        | N-LEG<br>A&B<br>15                | C&D<br>E-LEG<br>ION: |
|                                   | IDEWALK                                      |               |             |          |                | S-LEG                            | 6                 |           | SB(C+H)                           | 1                    |
| S                                 | TOP CONTRO                                   | OL LINE       |             |          |                | E-LEG                            | 1                 |           | EB(A+F)                           |                      |
|                                   | ТОР  | _             |             |          |                | W-LEG                            | 0                 |           | WB(B+E)                           | 7                    |
|                                   | WALK INRE                                    |               |             |          |                | 00.                              |                   | ********* |                                   |                      |
| TIME PERIOR From                  | To   | NORTH X-V     | B           | EAST X-W | D D            | E                                | X-WALK<br>F       | WEST X    | -WALK<br>H                        | TOTAL                |
| FIOII                             | 10   | А             |             | URVEY    | DAT            |                                  | r                 | · ·       | п                                 | IOIAL                |
| 07:00 AM                          | 07:15 AM                                     | 0             | 4           | 0        | 0              | 0                                | 2                 | 0         | 0                                 | 6                    |
|                                   | 07:30 AM                                     | 5             | 4           | 0        | 0              | 1                                | 2                 | 0         | 0                                 | 12                   |
|                                   | 07:45 AM                                     | 9             | 4           | 0        | 0              | 4                                | 4                 | 0         | 0                                 | 21                   |
|                                   | 08:00 AM                                     | 11            | 4           | 0        | 0              | 5                                | 6                 | 0         | 0                                 | 26                   |
|                                   | 08:15 AM                                     | 12            | 6           | 1        | 0              | 5                                | 6                 | 0         | 0                                 | 30                   |
|                                   | 08:30 AM                                     | 14            | 9           | 1        | 0              | 5                                | 7                 | 0         | 0                                 | 36                   |
|                                   | 08:45 AM                                     | 18            | 10          | 1        | 0              | 5                                | 9                 | 0         | 0                                 | 43                   |
|                                   | 09:00 AM                                     | 20            | 16          | 1        | 0              | 6                                | 9                 | 0         | 0                                 | 52                   |
|                                   |  |               |             | ΓAL BY   | PER            |                                  |                   |           | Ţ                                 |                      |
| 07:00 AM                          | 07:15 AM                                     | 0             | 4           | 0        | 0              | 0                                | 2                 | 0         | 0                                 | 6                    |
|                                   | 07:30 AM                                     | 5             | 0           | 0        | 0              | 1                                | 0                 | 0         | 0                                 | 6                    |
|                                   | 07:45 AM                                     | 4             | 0           | 0        | 0              | 3                                | 2                 | 0         | 0                                 | 9                    |
|                                   | 08:00 AM                                     | 2             | 0           | 0        | 0              | 1                                | 2                 | 0         | 0                                 | 5                    |
|                                   | 08:15 AM                                     | 1             | 2           | 1        | 0              | 0                                | 0                 | 0         | 0                                 | 4                    |
|                                   | 08:30 AM                                     | 2             | 3           | 0        | 0              | 0                                | 1                 | 0         | 0                                 | 6                    |
|                                   | 08:45 AM                                     | 4             | 1           | 0        | 0              | 0                                | 2                 | 0         | 0                                 | 7                    |
|                                   | 09:00 AM                                     | 2             | 6           | 0        | 0              | 1                                | 0                 | 0         | 0                                 | 9                    |
|                                   |  |               | НО          | OURLY    | ТОТА           | LS                               |                   |           |                                   |                      |
| 07:00 AM                          | 08:00 AM                                     | 11            | 4           | 0        | 0              | 5                                | 6                 | 0         | 0                                 | 26                   |
|                                   | 08:15 AM                                     | 12            | 2           | 1        | 0              | 5                                | 4                 | 0         | 0                                 | 24                   |
|                                   | 08:30 AM                                     | 9             | 5           | 1        | 0              | 4                                | 5                 | 0         | 0                                 | 24                   |
|                                   | 08:45 AM                                     | 9             | 6           | 1        | 0              | 1                                | 5                 | 0         | 0                                 | 22                   |
|                                   | 09:00 AM                                     | 9             | 12          | 1        | 0              | 1                                | 3                 | 0         | 0                                 | 26                   |
|                                   |  | : (510) 232-1 |             | EMAIL    |                | ETRICS@                          | GMAIL.CO          |           |                                   |                      |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 0     | 1     | 14    | 7     | 22    |
| VOLUME BY I | LEG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 15    | 6     | 1     | 0     | 22    |

| PROJECT:                        | SUR   | SURVEY DATE: 1/31/2017 DAY: TUESDAY |                |                |             |              | ΑY         |          |          |                 |            |       |                 |
|---------------------------------|---|-------------------------------------|----------------|----------------|-------------|--------------|------------|----------|----------|-----------------|------------|-------|-----------------|
| N-S APPROACH:                   | WISTERIA STRI                                     | EET                                 |                |                | VEY TIM     |              |            | :00 PM   |          | TO              | 6:00       | PM    |                 |
| E-W APPROACH:                   | CASTRO VALLE                                      | EY BOULEVA                          | RD             | JUR            | ISDICTIO    | ON:          | CASTRO     | O VAL    | LEY      | FILE:           | 3701005    | -2PM  |                 |
| PEAK HOUR 4:00 PM to 5:00 PM    | 1 1   | 0 0                                 | 0              | †<br>NORTH     |             |              | ARR        | IVAL / 1 | DEPARTI  | U <b>RE VOI</b> | LUMES      |       |                 |
|                                 |   |                                     |                |                |             |              | PHF =      | 0.25     | ]        |                 |            |       |                 |
|                                 |   |                                     | <b>U</b>       | 1              |             |              |            | 1        | 1        |                 |            |       |                 |
| 0                               |   |                                     |                | 1              |             |              |            | ı        | <b>†</b> |                 | PHF = 0.92 |       |                 |
| 0                               | ┧_♪  _  | 2204                                | ←              | 746            |             |              |            | <b>↓</b> | l        | Į.              |            |       |                 |
| 1310                            | ┧━┥   | 2204                                | <b>←</b>       | 25             |             | 754          | <b>←</b>   |          |          | ◆               | 776        |       |                 |
| 89                              |   |                                     |                | 4              |             | 1399         | <b> </b>   | 1        | <b>4</b> | <b>→</b>        | 1335       |       |                 |
| CASTRO VALLEY BOU               | LEVARD  | $\uparrow$                          | · _ ·          | ]              |             | PHF = 0.96   |            | <u> </u> |          |                 |            |       |                 |
|                                 | _ · ·   | 7 0 1                               | 21             |                |             |              |            | 114      | 28       |                 |            |       |                 |
|                                 | WISTERL   | 7 0<br>A STREET                     | 21             |                |             |              |            |          | PHF =    | 0.78            |            |       |                 |
| TIME PERIOD                     | NORTH   | ROUND                               | SOUT           | HBOUND         |             | EAST         | BOUND      |          | 1        | WEST            | BOUND      |       | TOTAL           |
| From To                         |   |                                     | U-TURN LEFT    |                | HT U-TUR    |              |            | RIGHT    | U-TURN   | LEFT            | THRU       | RIGHT | TOTAL           |
|                                 |   |                                     |                | RVEY           | DAT         |              |            |          |          |                 |            |       |                 |
| 4:00 PM to 4:15 PM              | 1 2   | 0 7                                 | 0              | 0 0            |             | 0            | 342        | 23       | 0        | 4               | 189        | 0     | 567             |
| 4:15 PM to 4:30 PM              | 4   | 0 9                                 | 0              | 0 0            |             | 0            | 629        | 48       | 1        | 12              | 356        | 1     | 1060            |
| 4:30 PM to 4:45 PM              | 5   | 0 17                                | 0              | 0 0            |             | 0            | 972        | 65       | 2        | 19              | 544        | 1     | 1625            |
| 4:45 PM to 5:00 PM              | 1 7   | 0 21                                | 0              | 0 1            |             | 0            | 1310       | 89       | 4        | 25              | 746        | 1     | 2204            |
| 5:00 PM to 5:15 PM              | 1 12  | 0 24                                | 0              | 0 1            |             | 0            | 1589       | 102      | 5        | 33              | 951        | 1     | 2718            |
| 5:15 PM to 5:30 PM              |   | 0 30                                | 0              | 0 2            |             | 0            | 1875       | 117      | 8        | 41              | 1149       | 1     | 3241            |
| 5:30 PM to 5:45 PM              |   | 0 34                                | 0              | 0 2            |             | 0            | 2145       | 131      | 13       | 51              | 1394       | 1     | 3789            |
| 5:45 PM to 6:00 PM              | 1 23  | 0 40                                | TOT            | 0 4<br>A L B Y | PERI        | <u>0</u>     | 2393       | 154      | 16       | 57              | 1589       | 1     | 4277            |
| 4:00 PM to 4:15 PM              | 1 0 2   | 0 7                                 | 0 0            | 0 0            | 0           | 0            | 342        | 23       | 0        | 4               | 189        | 0     | 567             |
| 4:15 PM to 4:30 PM              |   | 0 7 0 2                             | 0 0            | 0 0            | 0           | 0            | 287        | 25       | 1        | 8               | 167        | 1     | 493             |
| 4:30 PM to 4:45 PM              |   | 0 8                                 | 0 0            | 0 0            | 0           | 0            | 343        | 17       | 1        | 7               | 188        | 0     | 565             |
| 4:45 PM to 5:00 PM              |   | 0 4                                 | 0 0            | 0 1            | 0           | 0            | 338        | 24       | 2        | 6               | 202        | 0     | 579             |
| 5:00 PM to 5:15 PM              |   | 0 3                                 | 0 0            | 0 0            | 0           | 0            | 279        | 13       | 1        | 8               | 205        | 0     | 514             |
| 5:15 PM to 5:30 PM              |   | 0 6                                 | 0 0            | 0 1            | 0           | 0            | 286        | 15       | 3        | 8               | 198        | 0     | 523             |
| 5:30 PM to 5:45 PM              | 0 0   | 0 4                                 | 0 0            | 0 0            | 0           | 0            | 270        | 14       | 5        | 10              | 245        | 0     | 548             |
| 5:45 PM to 6:00 PM              | 1 0 5   | 0 6                                 | 0 0            | 0 2            | 0           | 0            | 248        | 23       | 3        | 6               | 195        | 0     | 488             |
|                                 |   |                                     | ТОН            | JRLY           | ТОТА        | LS           |            |          |          |                 |            |       |                 |
| 4:00 PM to 5:00 PM              |   | 0 21                                | 0 0            | 0 1            | 0           | 0            | 1310       | 89       | 4        | 25              | 746        | 1     | 2204            |
| 4:15 PM to 5:15 PM              |   | 0 17                                | 0 0            | 0 1            | 0           | 0            | 1247       | 79       | 5        | 29              | 762        | 1     | 2151            |
| 4:30 PM to 5:30 PM              |   | 0 21                                | 0 0            | 0 2            | 0           | 0            | 1246       | 69       | 7        | 29              | 793        | 0     | 2181            |
| 4:45 PM to 5:45 PM              |   | 0 17                                | 0 0            | 0 2            | 0           | 0            | 1173       | 66       | 11       | 32              | 850        | 0     | 2164            |
| 5:00 PM to 6:00 PM              | 0 16  | 0 19                                | 0 0<br>P E A K | 0 3<br>HOUR    | SUMN        | 0<br>1 A R V | 1083       | 65       | 12       | 32              | 843        | 0     | 2073            |
| 4:00 PM to 5:00 PM              | NORTH   | BOUND                               |                | HBOUND         | 5 O IVI I   |              | BOUND      |          |          | WEST            | BOUND      |       | TOTAL           |
|                                 | NBU NBL   | NBT NBR                             | SBU SBL        | SBT SB         |             | EBL          | EBT        | EBR      | WBU      | WBL             | WBT        | WBR   |                 |
| VOLUME<br>DHE DV MOVEMENT       | 0 7   | 0 21                                | 0 0            | 0 1            | 0           | 0            | 1310       | 89       | 4        | 25              | 746        | 0.25  | 2204            |
| PHF BY MOVEMENT PHF BY APPROACH | 0.00 0.88   | 0.00 0.66                           | 0.00 0.00      | 0.00 0.2       | 5 0.00      | 0.00         | 0.95<br>96 | 0.89     | 0.50     | 0.78            | 0.92       | 0.25  | OVERALL<br>0.95 |
| BICYCLE 0                       |   |                                     |                | 0              |             | 1            |            |          |          | 3               |            |       | 4               |
| PEDESTRIAN 0 0                  |   |                                     |                |                |             | 2            |            |          |          | 20              |            |       | 50              |
| DEDECEDATA                      | N-LE  | G                                   |                | EG             |             | E-L          |            |          |          | W-L             |            |       |                 |
| PEDESTRIAN BY LEG:              |   | TEL. (F10) 22                       |                | 24<br>EM A     | II . D 4 37 |              | )<br>reacm | AII C    | OM       | 0               |            |       | 50              |
|                                 | TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.COM |                                     |                |                |             |              |            |          |          |                 |            |       |                 |

### BICYCLE TURNING MOVEMENT SUMMARY

| PROJECT: TRAFFIC COUNTS IN CASTRO VALLEY N-S APPROACH: WISTERIA STREET |   |           |          |        |        |          |             |            |               | SURVEY DATE: 1/31/2017 DAY: TUESDAY |                                 |          |       |         |          |       |         |       |       |
|--|---|-----------|----------|--------|--------|----------|-------------|------------|---------------|-------------------------------------|---------------------------------|----------|-------|---------|----------|-------|---------|-------|-------|
| N-S APPR   |   |           |          |        |        |          |             |            |               | SURVE                               |                                 |          |       | 1:00 PM |          | TO    | 6:00    | PM    |       |
| E-W APP  | ROA   | CH:       | CASTR    | O VALI | LEY BO | ULEVA    | RD          |            |               | JURISI                              | ICTIO                           | N:       | CASTR | O VALI  | LEY      | FILE: | 3701005 | 5-2PM |       |
| PEA 4:00 PM  | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0                       |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |
|  |   |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |
|  | ri  |           | II TIIDA |        |        |          | II THE PART |            |               |                                     | II TEITE                        | 1        | 1 1   |         | II TIIDA |       |         |       | TOTAL |
| From   |   | То        | U-TURN   | LEFT   | THRU   | RIGHT    | U-TURN      | LEFT       | THRU<br>R V E |                                     | u-turn<br><b>) A</b> T <i>A</i> |          | THRU  | RIGHT   | U-TURN   | LEFT  | THRU    | RIGHT |       |
| 4.00 D) 4  |   | 4 15 D) 4 | 0        | 0      | 0      | 0        | 0           |            |               |                                     |                                 |          | 4     | 0       | 0        | 0     |         | 0     | _     |
|  | to  | 4:15 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 1       | 0     | 2     |
|  | to  | 4:30 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 2       | 0     | 3     |
| 4:30 PM  | to  | 4:45 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 2       | 0     | 3     |
| 4:45 PM  | to  | 5:00 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 3       | 0     | 4     |
| 5:00 PM  | to  | 5:15 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 3       | 0     | 4     |
|  | to  | 5:30 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 2     | 0       | 0        | 0     | 3       | 0     | 5     |
| 5:30 PM  | to  | 5:45 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 2     | 0       | 0        | 0     | 3       | 0     | 5     |
| 5:45 PM  | to  | 6:00 PM   | 0        | 1      | 0      | 0        | 0           | 0<br>T O T | 0<br>A T      | 0<br>D.V. F                         | 0<br>E D L                      | 0<br>O D | 2     | 0       | 0        | 0     | 5       | 0     | 8     |
|  |   |           |          |        |        |          |             | TOT        |               |                                     | ERI                             |          |       | _       |          |       |         |       |       |
| 4:00 PM  |   | 4:15 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 1       | 0     | 2     |
|  | to  | 4:30 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 1       | 0     | 1     |
|  | to  | 4:45 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 0       | 0     | 0     |
| 4:45 PM  | to  | 5:00 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 1       | 0     | 1     |
| 5:00 PM  | to  | 5:15 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 0       | 0     | 0     |
|  | to  | 5:30 PM   |          | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 0       | 0     | 1     |
|  |   |           |          |        |        |          |             |            |               | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 0       | 0     | 0     |
| 5:45 PM  | to  | 6:00 PM   | 0        | 1      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 2       | 0     | 3     |
|  | HOURLY TOTALS   |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |
| 4:00 PM  | 4:00 PM to 5:00 PM 0 0 0 0 0 0 0 0 0 0 0 0 4                |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |
| 4:15 PM  | to  | 5:15 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 0     | 0       | 0        | 0     | 2       | 0     | 2     |
| 4:30 PM  | to  | 5:30 PM   | 0        | 0      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 1       | 0     | 2     |
| 4:45 PM  | 4:45 PM to 5:45 PM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 <b>2</b> |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |
| 5:00 PM  | to  | 6:00 PM   | 0        | 1      | 0      | 0        | 0           | 0          | 0             | 0                                   | 0                               | 0        | 1     | 0       | 0        | 0     | 2       | 0     | 4     |
|  |   |           |          |        | TEL: ( | (510) 23 | 32 - 127    | l          |               | EMAIL:                              | BAYN                            | иETRIC   | CS@GM | AIL.C   | ON       |       |         |       |       |
|  |   |           |          |        |        |          |             |            |               |                                     |                                 |          |       |         |          |       |         |       |       |

| 4:00 PM to 5:00 PM |    |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 0  | 1  | 3  | 4     |

### PEDESTRIAN MOVEMENT SUMMARY

| NS APPROACH:   WISTERIA STREET   DAY:   TUESDX  | PROJECT:  |               | TRAFFIC C                                     | COUNTS IN    | CASTRO V                             |                     | SURVEY DATE: 1/31/2017 |  |                     |            |  |                  |
|---|-----------|---------------|---|--------------|--------------------------------------|---------------------|------------------------|--|---------------------|------------|--|------------------|
| PEAK HOUR   | N-S APPRO | OACH:         | WISTERIA                                      | STREET       |                                      |                     |                        |  | DAY:                |            | TUESDAY                                  |                  |
| PEAK HOUR  □ 5:00 PM    TO  |           |               |   |              |                                      |                     |                        |  |                     | TION:      |  |                  |
| CASTRO VALLEY BOULEYARD   WISTERIA STREET   BY LIEG   SALEG   SALEG | SURVEY P  | ERIOD:        | 4:00  | PM           | ТО                                   | 6:                  | 00 PM                  |  | FILE:               |            | 3701005-2P                               | M                |
| TIME PERIOD NORTH X-WALK EAST X-WALK SOUTH X-WALK From TO A B C D E F G H TOTAL  SURVEY DATA  04-00 PM 04-15 PM 4 9 0 0 0 1 0 0 0 17 04-30 PM 04-45 PM 15 22 0 0 0 0 12 24 0 0 0 89 05-30 PM 05-00 PM 28 43 0 0 17 04-00 PM 04-15 PM 1 4 0 0 0 12 24 0 0 0 89 05-45 PM 05-10 PM 3 5 0 0 0 14 28 0 0 116 04-15 PM 05-00 PM 28 43 0 0 0 17 04-30 PM 04-45 PM 1 4 0 0 0 17 04-30 PM 05-00 PM 28 43 0 0 0 17 04-30 PM 05-00 PM 3 5 0 0 0 17 04-30 PM 05-00 PM 3 5 0 0 0 17 04-30 PM 05-15 PM 15 0 0 0 0 17 05-30 PM 05-15 PM 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0  | 04:00 PM  | O H ALLEY BOU | 05:00 PM  0 G LEVARD 7 17  CROSSWALK SIDEWALK | FWISTERIA    | •<br>•<br>•<br>•<br>•<br>•<br>•<br>• | 7<br>C              |                        | W-LEG<br>G8<br>BY LEG:<br>N-LEG<br>S-LEG | 24 E&F S-LEG  26 24 | SIAN VOLUM | N-LEG A&B 26   BY DIRECT NB(D+G) SB(C+H) | E-LEG  ION:  0 0 |
| TIME   PERIOD   NORTH X-WALK   EAST X-WALK   SOUTH X-WALK   From   To   A   B   C   D   E   F   G   H   TOTAL   |           | _             |   | ROL LINE     |                                      |                     |                        |  |                     |            | ` ′                                      |                  |
| From  |           |               | STOP  |              |                                      |                     |                        | W-LEG                                    | 0                   |            | WB(B+E)                                  | 26               |
| From  | тт        | ME PERI       | IOD   | NORTH        | X-WALK                               | EAST                | X-WALK                 | SOUT                                     | H X-WALK            | WEST       | X-WALK                                   |                  |
| SURVEY DATA   | -         | TEIC          | _   |              |                                      |                     |                        |  |                     |            |  | TOTAL            |
| 04:15 PM 04:30 PM 4 9 0 0 0 2 2 2 0 0 0 17 04:30 PM 04:45 PM 5 18 0 0 4 12 0 0 39 04:45 PM 05:00 PM 7 19 0 0 7 17 0 0 0 50 05:00 PM 05:15 PM 15 22 0 0 0 9 20 0 0 0 66 05:15 PM 05:30 PM 25 28 0 0 12 24 0 0 89 05:30 PM 05:45 PM 27 37 0 0 14 28 0 0 166 05:45 PM 06:00 PM 28 43 0 0 17 28 0 0 166 04:15 PM 04:15 PM 1 4 0 0 17 28 0 0 166 04:15 PM 04:45 PM 1 9 0 0 0 1 0 0 0 66 04:15 PM 05:00 PM 2 1 0 0 0 2 10 0 0 22 04:45 PM 05:00 PM 2 1 0 0 0 2 10 0 0 22 05:30 PM 05:15 PM 8 3 0 0 0 166 05:15 PM 05:15 PM 8 3 0 0 0 2 2 10 0 0 22 05:30 PM 05:15 PM 8 3 0 0 0 2 2 3 0 0 166 05:15 PM 05:00 PM 1 1 0 0 0 2 2 3 0 0 166 05:15 PM 05:00 PM 1 0 0 0 2 2 4 0 0 17 05:15 PM 05:30 PM 1 0 0 0 0 2 2 4 0 0 17 05:45 PM 05:30 PM 1 0 0 0 0 2 2 4 0 0 17 05:45 PM 05:30 PM 1 1 0 0 0 3 3 0 0 0 10  HOURLY TOTALS  04:00 PM 05:15 PM 1 18 0 0 8 20 0 0 0 10 04:00 PM 05:15 PM 14 18 0 0 8 20 0 0 0 72 04:45 PM 05:00 PM 21 19 0 0 10 10 22 0 0 0 72 04:45 PM 05:30 PM 12 19 0 0 10 10 22 0 0 0 72 04:45 PM 05:30 PM 12 19 0 0 10 10 16 0 0 0 72 04:45 PM 05:30 PM 12 19 0 0 0 10 10 16 0 0 0 72 04:45 PM 05:30 PM 22 19 0 0 0 10 10 11 0 0 0 66   |           |               |   |              | S                                    | URVE                | EY DAT.                | A  |                     |            |  |                  |
| 04:30 PM          04:45 PM         5         18         0         0         4         12         0         0         39           04:45 PM          05:00 PM         7         19         0         0         7         17         0         0         50           05:00 PM          05:15 PM         15         22         0         0         9         20         0         0         66           05:15 PM          05:30 PM         25         28         0         0         12         24         0         0         89           05:30 PM          05:45 PM         27         37         0         0         14         28         0         0         106           05:45 PM          06:00 PM         28         43         0         0         17         28         0         0         116           T O T A L         B Y P E R I O D           04:05 PM          04:15 PM         1         4         0         0         1         0         0         0         116           04:15 PM          04:45 PM  | 04:00 PM  |               | 04:15 PM                                      | 1            | 4                                    | 0                   | 0                      | 1  | 0                   | 0          | 0  | 6                |
| 04:45 PM          05:00 PM         7         19         0         0         7         17         0         0         50           05:00 PM          05:15 PM         15         22         0         0         9         20         0         0         66           05:15 PM          05:30 PM         25         28         0         0         12         24         0         0         89           05:30 PM          05:45 PM         27         37         0         0         14         28         0         0         106           05:45 PM          06:00 PM         28         43         0         0         17         28         0         0         116           TOTAL BY PERIOD           TOTAL BY PERIOD           04:00 PM          04:15 PM         1         4         0         0         1         2         0         0         116           04:00 PM          04:45 PM         1         9         0         0         2         10         0         0         22           04:45 PM   | 04:15 PM  |               | 04:30 PM                                      | 4            | 9                                    | 0                   | 0                      | 2  | 2                   | 0          | 0  | 17               |
| 05:00 PM          05:15 PM         15         22         0         0         9         20         0         0         66           05:15 PM          05:30 PM         25         28         0         0         12         24         0         0         89           05:30 PM          05:45 PM         27         37         0         0         14         28         0         0         106           05:45 PM          06:00 PM         28         43         0         0         17         28         0         0         116           TOTAL BY PERIOD           TOTAL BY PERIOD           04:00 PM          04:15 PM         1         4         0         0         1         0         0         0         6           04:15 PM          04:30 PM         3         5         0         0         1         2         0         0         11           04:45 PM          05:00 PM         2         1         0         0         2         10         0         0         22           04:45 PM        <  | 04:30 PM  |               | 04:45 PM                                      | 5            | 18                                   | 0                   | 0                      | 4  | 12                  | 0          | 0  | 39               |
| 05:15 PM          05:30 PM         25         28         0         0         12         24         0         0         89           05:30 PM          05:45 PM         27         37         0         0         14         28         0         0         106           05:45 PM          06:00 PM         28         43         0         0         17         28         0         0         116           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L         B Y         P E R I O D           TO TA L   | 04:45 PM  |               | 05:00 PM                                      | 7            | 19                                   | 0                   | 0                      | 7  | 17                  | 0          | 0  | 50               |
| 05:30 PM          05:45 PM         27         37         0         0         14         28         0         0         106           05:45 PM          06:00 PM         28         43         0         0         17         28         0         0         116           TOTAL BY PERIOD           04:00 PM          04:15 PM         1         4         0         0         1         0         0         0         6           04:15 PM          04:30 PM         3         5         0         0         1         2         0         0         11           04:30 PM          04:45 PM         1         9         0         0         2         10         0         0         22           04:45 PM          05:00 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:15 PM         8         3         0         0         2         3         0         0         16           05:30 PM          05:30 PM         10         6   | 05:00 PM  |               | 05:15 PM                                      | 15           | 22                                   | 0                   | 0                      | 9  | 20                  | 0          | 0  | 66               |
| O5:45 PM  | 05:15 PM  |               | 05:30 PM                                      | 25           | 28                                   | 0                   | 0                      | 12                                       | 24                  | 0          | 0  | 89               |
| TOTAL BY PERIOD   | 05:30 PM  |               | 05:45 PM                                      | 27           | 37                                   | 0                   | 0                      | 14                                       | 28                  | 0          | 0  | 106              |
| 04:00 PM          04:15 PM         1         4         0         0         1         0         0         0         6           04:15 PM          04:30 PM         3         5         0         0         1         2         0         0         11           04:30 PM          04:45 PM         1         9         0         0         2         10         0         0         0         22           04:45 PM          05:00 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:05 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:30 PM         10         6         0         0         3         4         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          05:00 PM         7         19         0         0         7 <td>05:45 PM</td> <td></td> <td>06:00 PM</td> <td>28</td> <td>43</td> <td>0</td> <td>0</td> <td>17</td> <td>28</td> <td>0</td> <td>0</td> <td>116</td>   | 05:45 PM  |               | 06:00 PM                                      | 28           | 43                                   | 0                   | 0                      | 17                                       | 28                  | 0          | 0  | 116              |
| 04:15 PM          04:30 PM         3         5         0         0         1         2         0         0         11           04:30 PM          04:45 PM         1         9         0         0         2         10         0         0         22           04:45 PM          05:00 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:15 PM         8         3         0         0         2         3         0         0         16           05:15 PM          05:30 PM         10         6         0         0         3         4         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           04:00 PM          05:00 PM         7         19         0         0         7         17 </td <td></td> <td></td> <td></td> <td></td> <td>TO</td> <td>Γ<mark>AL</mark> Ι</td> <td>BY PER</td> <td>IOD</td> <td></td> <td></td> <td></td> <td></td>  |           |               |   |              | TO                                   | Γ <mark>AL</mark> Ι | BY PER                 | IOD                                      |                     |            |  |                  |
| 04:30 PM          04:45 PM         1         9         0         0         2         10         0         0         22           04:45 PM          05:00 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:15 PM         8         3         0         0         2         3         0         0         16           05:15 PM          05:30 PM         10         6         0         0         3         4         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18 <td>04:00 PM</td> <td></td> <td>04:15 PM</td> <td>1</td> <td>4</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>6</td>   | 04:00 PM  |               | 04:15 PM                                      | 1            | 4                                    | 0                   | 0                      | 1  | 0                   | 0          | 0  | 6                |
| 04:45 PM          05:00 PM         2         1         0         0         3         5         0         0         11           05:00 PM          05:15 PM         8         3         0         0         2         3         0         0         0         16           05:15 PM          05:30 PM         10         6         0         0         3         4         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18         0         0         8         20         0         0         60           04:30 PM          05:30 PM         21 <td>04:15 PM</td> <td></td> <td>04:30 PM</td> <td>3</td> <td>5</td> <td>0</td> <td>0</td> <td>1</td> <td>2</td> <td>0</td> <td>0</td> <td>11</td>   | 04:15 PM  |               | 04:30 PM                                      | 3            | 5                                    | 0                   | 0                      | 1  | 2                   | 0          | 0  | 11               |
| 05:00 PM          05:15 PM         8         3         0         0         2         3         0         0         16           05:15 PM          05:30 PM         10         6         0         0         3         4         0         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y         T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18         0         0         8         20         0         0         60           04:30 PM          05:30 PM         21         19         0         0         10         16         0         0         67           05:00 PM          05:45 PM </td <td>04:30 PM</td> <td></td> <td>04:45 PM</td> <td>1</td> <td>9</td> <td>0</td> <td>0</td> <td>2</td> <td>10</td> <td>0</td> <td>0</td> <td>22</td>  | 04:30 PM  |               | 04:45 PM                                      | 1            | 9                                    | 0                   | 0                      | 2  | 10                  | 0          | 0  | 22               |
| 05:15 PM          05:30 PM         10         6         0         0         3         4         0         0         23           05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18         0         0         8         20         0         0         60           04:30 PM          05:30 PM         21         19         0         0         10         12         22         0         0         72           04:45 PM          05:45 PM         22         19         0         0         10         16         0         0         66           05:00 PM          06:  | 04:45 PM  |               | 05:00 PM                                      | 2            | 1                                    | 0                   | 0                      | 3  | 5                   | 0          | 0  | 11               |
| 05:30 PM          05:45 PM         2         9         0         0         2         4         0         0         17           05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y         T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18         0         0         8         20         0         0         60           04:30 PM          05:30 PM         21         19         0         0         10         22         0         0         72           04:45 PM          05:45 PM         22         19         0         0         10         16         0         0         66           05:00 PM          06:00 PM         21         24         0         0         10         11         0         0         66  | 05:00 PM  |               | 05:15 PM                                      | 8            | 3                                    | 0                   | 0                      | 2  | 3                   | 0          | 0  | 16               |
| 05:45 PM          06:00 PM         1         6         0         0         3         0         0         0         10           H O U R L Y         T O T A L S           04:00 PM          05:00 PM         7         19         0         0         7         17         0         0         50           04:15 PM          05:15 PM         14         18         0         0         8         20         0         0         60           04:30 PM          05:30 PM         21         19         0         0         10         22         0         0         72           04:45 PM          05:45 PM         22         19         0         0         10         16         0         0         67           05:00 PM          06:00 PM         21         24         0         0         10         11         0         0         66  | 05:15 PM  |               | 05:30 PM                                      | 10           | 6                                    | 0                   | 0                      | 3  | 4                   | 0          | 0  | 23               |
| HOURLY TOTALS  04:00 PM 05:00 PM 7 19 0 0 7 17 0 0 0 50  04:15 PM 05:15 PM 14 18 0 0 8 20 0 0 0 60  04:30 PM 05:30 PM 21 19 0 0 10 22 0 0 7  04:45 PM 05:45 PM 22 19 0 0 10 16 0 0 67  05:00 PM 06:00 PM 21 24 0 0 10 11 0 0 66   | 05:30 PM  |               | 05:45 PM                                      | 2            | 9                                    | 0                   | 0                      | 2  | 4                   | 0          | 0  | 17               |
| 04:00 PM      05:00 PM     7     19     0     0     7     17     0     0     50       04:15 PM      05:15 PM     14     18     0     0     8     20     0     0     60       04:30 PM      05:30 PM     21     19     0     0     10     22     0     0     72       04:45 PM      05:45 PM     22     19     0     0     10     16     0     0     67       05:00 PM      06:00 PM     21     24     0     0     10     11     0     0     66  | 05:45 PM  |               | 06:00 PM                                      | 1            |                                      | -                   |                        |  | 0                   | 0          | 0  | 10               |
| 04:15 PM      05:15 PM     14     18     0     0     8     20     0     0     60       04:30 PM      05:30 PM     21     19     0     0     10     22     0     0     72       04:45 PM      05:45 PM     22     19     0     0     10     16     0     0     67       05:00 PM      06:00 PM     21     24     0     0     10     11     0     0     66  |           |               |   |              | Н (                                  | URLY                | TOTA                   | LS                                       |                     |            |  |                  |
| 04:30 PM      05:30 PM     21     19     0     0     10     22     0     0     72       04:45 PM      05:45 PM     22     19     0     0     10     16     0     0     67       05:00 PM      06:00 PM     21     24     0     0     10     11     0     0     66   | 04:00 PM  |               | 05:00 PM                                      | 7            | 19                                   | 0                   | 0                      | 7  | 17                  | 0          | 0  | 50               |
| 04:45 PM          05:45 PM         22         19         0         0         10         16         0         0         67           05:00 PM          06:00 PM         21         24         0         0         10         11         0         0         66   | 04:15 PM  |               | 05:15 PM                                      | 14           | 18                                   | 0                   | 0                      | 8  | 20                  | 0          | 0  | 60               |
| 05:00 PM 06:00 PM 21 24 0 0 10 11 0 0 <b>66</b>   | 04:30 PM  |               | 05:30 PM                                      | 21           | 19                                   | 0                   | 0                      | 10                                       | 22                  | 0          | 0  | 72               |
|   | 04:45 PM  |               | 05:45 PM                                      | 22           | 19                                   | 0                   | 0                      | 10                                       | 16                  | 0          | 0  | 67               |
| Tel: (510) 232-1271   | 05:00 PM  |               |   |              |                                      |                     |                        |  |                     |            | 0  | 66               |
| 100 (510) MSM-1M11 Diffill Building Commission  |           |               | Tel   | l : (510) 23 | 32-1271                              | EM                  | IAIL: BAYM             | ETRICS                                   | @GMAIL.CO           | OM         |  |                  |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 0     | 0     | 24    | 26    | 50    |
| VOLUME BY I | LEG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 26    | 24    | 0     | 0     | 50    |

| PROJECT   | <b>':</b> |                | TRAFF     | IC COU  | INTS IN | CASTR | O VALI    | LEY                  |            | SURVE      | Y DATE:                            | :           | 1          | /31/201   | 7 ]       | DAY:              | TUESD      | AY       |             |
|---|-----------|----------------|-----------|---------|---------|-------|-----------|----------------------|------------|------------|------------------------------------|-------------|------------|-----------|-----------|-------------------|------------|----------|-------------|
| N-S APPR  | OACH:     | :              | ANITA     | AVENU   | JE      |       |           |                      |            | SURVE      | Y TIME:                            |             |            | 7:00 AM   | Ι ′       | ТО                | 9:00       | AM       |             |
| E-W APPR  | ROACH     | I:             | CASTR     | O VALI  | LEY BOU | JLEVA | RD        |                      |            | JURISI     | ICTION                             | :           | CASTR      | O VALI    | LEY       | FILE:             | 3701005    | -3AM     |             |
|   | C HOUR    | 45 AM          |           |         |         |       |           |                      | †<br>NORTH |            |                                    |             | ARR        | RIVAL / I | DEPARTU   | JRE VO            | LUMES      |          |             |
|   |           |                | ļ         | 141     | 0       | 126   | 0         |                      |            |            |                                    | [           | PHF =      | 0.74      |           |                   |            |          |             |
|   |           | ĺ              |           |         |         |       | <u> </u>  |                      | 1          |            |                                    |             | ļ          | 267       | 101       |                   |            |          |             |
|   |           | 6              | $\bigcap$ |         |         |       |           | •                    | 35         |            |                                    |             |            | - 1       | <b>†</b>  |                   | PHF =      |          |             |
|   |           | 66             | _•        |         |         |       |           | <b>←</b>             | 700        |            |                                    |             |            | 1         |           | ļ                 | 0.91       |          |             |
|   |           | 731            | _         |         | 180     | )6    | ]         |                      | 0          | *          |                                    | 847         | 1          |           |           | 1                 | 735        |          |             |
|   |           |                |           |         |         |       |           | _                    |            |            |                                    | 804         | <b>→</b>   |           |           | $\longrightarrow$ | 857        |          |             |
|   |           | 1              | 7         | _       | 4       | •     | <b>*</b>  | $\hookrightarrow$    | 0          |            |                                    | PHF =       |            |           | 1         |                   |            |          |             |
| CASTRO VALLEY BOULEVARD   |           |                |           |         |         |       |           |                      |            | L          | 0.68                               |             | *          | '         |           |                   |            |          |             |
| * No Left Turn  |           |                |           |         |         |       |           |                      |            |            |                                    |             |            | 1         | 0         |                   |            |          |             |
|   |           |                | •         | ANITA . | AVENUE  |       |           |                      |            |            |                                    |             |            |           | PHF =     | 0.00              |            |          |             |
| TIME  | PERI      | OD             |           | NORT    | HBOUNI  | )     |           | SOUT                 | HBOUNI     | )          |                                    | EAST        | BOUND      | )         |           | WEST              | BOUND      |          | TOTAL       |
| From  |           | То             | U-TURN    | LEFT    | THRU    | RIGHT | U-TURN    | LEFT                 | THRU       | RIGHT      | U-TURN                             | LEFT        | THRU       | RIGHT     | U-TURN    | LEFT              | THRU       | RIGHT    | <u> </u>    |
|   |           |                |           |         |         |       |           | SU                   | RVEY       | Ι          | АТА                                |             |            |           |           |                   |            |          | _           |
|   |           | 15 AM          |           | 0       | 0       | 0     |           | 5                    | 0          | 23         | 2                                  | 11          | 76         | 0         |           |                   | 118        | 5        | 240         |
|   |           | 30 AM          |           | 0       | 0       | 0     |           | 23                   | 0          | 46         | 2                                  | 22          | 174        | 0         |           |                   | 221        | 8        | 496         |
|   |           | 45 AM<br>00 AM |           | 0       | 0       | 0     |           | 37<br>83             | 0          | 69<br>113  | 4<br>6                             | 39<br>62    | 347<br>618 | 0         |           |                   | 355<br>511 | 10<br>19 | 861<br>1412 |
|   |           | 15 AM          |           | 0       | 0       | 0     |           | 130                  | 0          | 155        | 8                                  | 78          | 785        | 1         |           |                   | 686        | 30       | 1873        |
|   |           | 30 AM          |           | 0       | 0       | 0     |           | 147                  | 0          | 176        | 9                                  | 93          | 921        | 1         |           |                   | 882        | 37       | 2266        |
| 8:30 AM   | to 8:4    | 45 AM          |           | 0       | 0       | 0     |           | 163                  | 0          | 210        | 10                                 | 105         | 1078       | 1         |           |                   | 1055       | 45       | 2667        |
| 8:45 AM   | to 9:0    | 00 AM          |           | 0       | 0       | 0     |           | 169                  | 0          | 233        | 3                                  | 115         | 1216       | 3         |           |                   | 1180       | 52       | 2971        |
|   |           |                |           |         |         |       | ,         | TOT.                 | AL B       | Y P        | ERIO                               | D           |            |           | T         |                   |            |          |             |
|   |           | 15 AM          | 0         | 0       | 0       | 0     | 0         | 5 0 23 2 11 76 0 0 0 |            |            |                                    |             |            | 118       | 5         | 240               |            |          |             |
|   |           | 30 AM          | 0         | 0       | 0       | 0     | 0         | 18                   | 0          | 23         | 0                                  | 11          | 98         | 0         | 0         | 0                 | 103        | 3        | 256         |
|   |           | 45 AM          | 0         | 0       | 0       | 0     | 0 14 0 23 |                      |            |            | 2                                  | 17          | 173        | 0         | 0         | 0                 | 134        | 2        | 365         |
|   |           | 00 AM<br>15 AM | 0         | 0       | 0       | 0     | 0         | 46<br>47             | 0          | 44         | 2                                  | 23<br>16    | 271<br>167 | 0         | 0         | 0                 | 156<br>175 | 9        | 551<br>461  |
|   |           | 30 AM          | 0         | 0       | 0       | 0     | 0         | 17                   | 0          | 21         | 1                                  | 15          | 136        | 0         | 0         | 0                 | 173        | 7        | 393         |
|   |           | 45 AM          | 0         | 0       | 0       | 0     | 0         | 16                   | 0          | 34         | 1                                  | 12          | 157        | 0         | 0         | 0                 | 173        | 8        | 401         |
|   |           | 00 AM          | 0         | 0       | 0       | 0     | 0         | 6                    | 0          | 23         | -7                                 | 10          | 138        | 2         | 0         | 0                 | 125        | 7        | 304         |
|   |           |                |           |         |         |       |           | НОГ                  | JRLY       | T (        | TAL                                | S           |            |           |           |                   |            |          |             |
| 7:00 AM   | to 8:0    | 00 AM          | 0         | 0       | 0       | 0     | 0         | 83                   | 0          | 113        | 6                                  | 62          | 618        | 0         | 0         | 0                 | 511        | 19       | 1412        |
| 7:15 AM   | to 8:     | 15 AM          | 0         | 0       | 0       | 0     | 0         | 125                  | 0          | 132        | 6                                  | 67          | 709        | 1         | 0         | 0                 | 568        | 25       | 1633        |
| 7:30 AM   |           | 30 AM          | 0         | 0       | 0       | 0     | 0         | 124                  | 0          | 130        | 7                                  | 71          | 747        | 1         | 0         | 0                 | 661        | 29       | 1770        |
| 7:45 AM   |           | 45 AM          | 0         | 0       | 0       | 0     | 0         | 126                  | 0          | 141        | 6                                  | 66          | 731        | 1         | 0         | 0                 | 700        | 35       | 1806        |
| 8:00 AM   | to 9:0    | 00 AM          | 0         | 0       | 0       | 0     | 0<br>P F  | 86<br>A K            | HOU        | 120<br>R S | -3<br>U M M A                      | 53<br>A R V | 598        | 3         | 0         | 0                 | 669        | 33       | 1559        |
| 7:45 AM   | to 8:4    | 15 ДМ          |           | NODT    | HBOUNI  | )     | r E       |                      | HBOUNI     |            | ∪ 1 <b>V1</b> 1 <b>V1</b> <i>F</i> |             | BOUND      | )         | I         | WECT              | BOUND      | 1        | TOTAL       |
| / .43 AIVI  | io 6.4    | TJ AIVI        | NBU       | NBL     | NBT     | NBR   | SBU       | SBL                  | SBT        | SBR        | EBU                                | EBL         | EBT        | EBR       | WBU       | WBL               | WBT        | WBR      | TOTAL       |
|   | LUME      |                | 0         | 0       | 0       | 0     | 0         | 126                  | 0          | 141        | 6                                  | 66          | 731        | 1         | 0         | 0                 | 700        | 35       | 1806        |
| PHF BY M  |           |                | 0.00      | 0.00    | 0.00    | 0.00  | 0.00      | 0.67                 | 0.00       | 0.80       | 0.75                               | 0.72        | 0.67       | 0.25      | 0.00      | 0.00              | 0.89       | 0.80     | OVERALL     |
| PHF BY APPROACH         0.00         0.74           BICYCLE         0         1 |           |                |           |         |         |       |           | 0.6                  |            |            |                                    | 0.          |            |           | 0.82<br>3 |                   |            |          |             |
| PEDESTRIAN 7 4  |           |                |           |         |         |       |           | 11                   |            |            |                                    |             | )          |           | 31        |                   |            |          |             |
| N-LEG S-LEG   |           |                |           |         |         |       | E-L       | EG                   |            |            | W-I                                |             |            |           |           |                   |            |          |             |
| PEDESTRIAN BY LEG: 13 7   |           |                |           |         |         |       | 0         |                      |            |            | 1                                  | 1           |            | 31        |           |                   |            |          |             |
| TEL: (510) 232 - 1271 EMAIL: BAYMETRICS@GMAIL.COM                               |           |                |           |         |         |       |           |                      |            |            |                                    |             |            |           |           |                   |            |          |             |

# BICYCLE TURNING MOVEMENT SUMMARY FFIC COUNTS IN CASTRO VALLEY SURVEY DATE: 1/31/2017 DAY: TUESDAY

| PROJECT:  | TRAFI   | FIC COU | NTS IN CAST                                     |          | SURVE | Y DAT  | E:         | 1            | /31/2017 | 7     | DAY:                     | TUESD        | AY      |           |              |       |
|---|---|---------|---|----------|-------|--------|------------|--------------|----------|-------|--------------------------|--------------|---------|-----------|--------------|-------|
| N-S APPROACH:   |   | A AVENU |   | SURVE    |       |        |            | :00 AM       |          | TO    | 9:00                     | AM           |         |           |              |       |
| E-W APPROACH:   | CASTI   | RO VALI | EY BOULEV                                       | ARD      |       |        | JURISI     | DICTIO       | N:       | CASTR | O VALI                   | LEY          | FILE:   | 370100    | 5-3AM        |       |
| PEAK HOUR 7:45 AM to 8:45   | AM  |         | 3   |          |       | 1<br>] |            | TAL W-I      |          |       | PEAK<br>L BICYC<br>N-END | HOUR CLE VOI | LUMES ] | TAL E-E 3 | END<br> <br> |       |
| 0         0 |   |         |   |          |       |        |            |              |          |       |                          |              |         | TOTAL     |              |       |
| From To   | _   |         | THRU RIGHT                                      | Γ U-TURN |       | THRU   |            | U-TURN       | LEFT     | THRU  |                          | U-TURN       | LEFT    | THRU      | RIGHT        | TOTAL |
| 110   | o romi  | LLII    | c Right   | o rom    |       | RVE    |            | O A T A      | 1        |       |                          | JIJKK        |         | 1.1110    | 100111       |       |
| 7:00 AM to 7:15   | AM 0  | 0       | 0 0   | 0        | 0     | 0      | 0          | 0            | 0        | 0     | 0                        | 0            | 0       | 0         | 1            | 1     |
| 7:15 AM to 7:30   |   | 0       | 0 0   | 0        | 1     | 0      | 0          | 0            | 0        | 1     | 0                        | 0            | 0       | 0         | 1            | 3     |
| 7:30 AM to 7:45   |   | 0       | 0 0   | 0        | 2     | 0      | 0          | 0            | 0        | 1     | 0                        | 0            | 0       | 0         | 1            | 4     |
| 7:45 AM to 8:00   |   | 0       | 0 0   | 0        | 2     | 0      | 0          | 0            | 0        | 2     | 0                        | 0            | 0       | 0         | 1            | 5     |
| 8:00 AM to 8:15   |   | 0       | 0 0   | 0        | 3     | 0      | 0          | 0            | 0        | 2     | 0                        | 0            | 0       | 0         | 1            | 6     |
| 8:15 AM to 8:30   |   | 0       | 0 0   | 0        | 3     | 0      | 0          | 0            | 0        | 2     | 0                        | 0            | 0       | 0         | 1            | 6     |
| 8:30 AM to 8:45   |   | 0       | 0 0   | 0        | 3     | 0      | 0          | 0            | 0        | 2     | 0                        | 0            | 0       | 1         | 1            | 7     |
| 8:45 AM to 9:00   |   | 0       | 0 0   | 0        | 3     | 0      | 0          | 0            | 0        | 2     | 0                        | 0            | 0       | 1         | 1            | 7     |
| 0.1071111 10 7.00   |   | V       | 3   | V        | TOTA  |        |            | ERIC         |          |       | U                        | U            | V       |           |              | ,     |
| 7:00 AM to 7:15   | AM 0  | 0       | 0 0   | 0        | 0     | 0      | 0          | 0            | 0        | 0     | 0                        | 0            | 0       | 0         | 1            | 1     |
| 7:15 AM to 7:30   |   | 0       | 0 0   | 0        | 1     | 0      | 0          | 0            | 0        | 1     | 0                        | 0            | 0       | 0         | 0            | 2     |
| 7:30 AM to 7:45   |   | 0       | 0 0   | 0        | 1     | 0      | 0          | 0            | 0        | 0     | 0                        | 0            | 0       | 0         | 0            | 1     |
| 7:45 AM to 8:00   |   | 0       | 0 0   | 0        | 0     | 0      | 0          | 0            | 0        | 1     | 0                        | 0            | 0       | 0         | 0            | 1     |
| 8:00 AM to 8:15   |   | 0       | 0 0   | 0        | 1     | 0      | 0          | 0            | 0        | 0     | 0                        | 0            | 0       | 0         | 0            | 1     |
| 8:15 AM to 8:30   |   | 0       | 0 0   | 0        | 0     | 0      | 0          | 0            | 0        | 0     | 0                        | 0            | 0       | 0         | 0            | 0     |
|   |   |         |   |          |       |        |            |              | 0        | 0     | 0                        | 0            | 0       | 1         | 0            | 1     |
|   | 8:30 AM to 8:45 AM 0 0 0 0 0 0 0 0 0 8:45 AM to 9:00 AM 0 0 0 0 0 0 0 0 |         |   |          |       |        |            |              | 0        | 0     | 0                        | 0            | 0       | 0         | 0            | 0     |
| 0.43 AIVI 10 9.00   | 1141 U  | U       | 0 0   | U        |       |        | 0<br>7 T ( | 0<br>O T A I |          | U     | U                        | U            | U       | U         | U            | U     |
| HOURLY TOTALS  7:00 AM to 8:00 AM 0 0 0 0 0 2 0 0 0 2 0 0 0 1   |   |         |   |          |       |        |            |              |          |       |                          | F            |         |           |              |       |
|   |   |         | 0 0   | 0        | 2     |        | 0          | 0            | 0        | 2 2   | 0                        | 0            | 0       | 0         | 1            | 5     |
|   |   | 0       | 0 0   | 0        | 3     | 0      | 0          | 0            |          |       | 0                        |              | 0       |           | 0            | 5     |
|   |   | 0       | 0 0   | 0        | 2     | 0      | 0          |              | 0        | 1     | 0                        | 0            |         | 0         | 0            | 3     |
| 7:45 AM to 8:45 .<br>8:00 AM to 9:00 .  |   | 0       | $\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$ | 0        | 1     | 0      | 0          | 0            | 0        | 1     | 0                        | 0            | 0       | 1         | 0            | 3 2   |
| 0.00 AW 10 9.00   | 2141 0  |         | TEL: (510)                                      |          |       |        |            |              |          | CS@GM |                          |              | U       | 1         | U            |       |
|   |   |         | ()  | <b>-</b> |       |        |            |              |          |       |                          |              |         |           |              |       |

| 7:45 AM to 8:45 AM |    |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 1  | 1  | 1  | 3     |

# B.A.Y.M.E.T.R.I.C.S. PEDESTRIAN MOVEMENT SUMMARY

| NS. APPROACH:   ANTIA AVENUE   | PROJECT   | :             | TRAFFIC C                                      | OUNTS IN                               | CASTRO V                        | ALLEY       |          |  | SURVEY I   | ATE:       | 1/31/2017                                   |                  |    |
|--|---|---------------|--|--|---------------------------------|-------------|----------|--|--|------------|---|------------------|----|
| PEAK HOUR  | N-S APPRO   | OACH:         | ANITA AVI                                      | ENUE                                   |                                 |             |          |  | DAY:   |            | TUESDAY                                     |                  |    |
| PEAK HOUR  | E-W APPR  | OACH:         | CASTRO V                                       | ALLEY BO                               | ULEVARD                         |             |          |  | JURISDIC   | TION:      | CASTRO V                                    | ALLEY            |    |
|  | SURVEY P  | ERIOD:        | 7:00   | AM                                     | TO                              | 9:00        | AM       | _  | FILE:  |            | 3701005-3A                                  | M                |    |
| TIME PERIOD NORTH X-WALK BAST X-WALK SOUTH X-WALK WEST X-WALK From 1 To A B C D E F G H TOTAL    SURVEY DATA   |   | 4 H ALLEY BOU | 08:45 AM  7  GULEVARD  1 6  CROSSWALK SIDEWALK | ###################################### | •<br>•<br>•<br>•<br>•<br>•<br>• | 5<br>C<br>↓ |          | W-LEG<br>G&<br>BY LEG:<br>N-LEG<br>S-LEG | TAL PEDESTI  TO SHAPE TO SHAPE THE STATE THE STATE THE SHAPE THE S | RIAN VOLUM | N-LEG A&B 13   D  BY DIRECT NB(D+G) SB(C+H) | E-LEG  ION:  7 4 |    |
| TIME   PERIOD   NORTH X-WALK   EAST X-WALK   SOUTH X-WALK   WEST X-WALK   From   To   A   B   C   D   E   F   G   H   TOTAL  |   | _             |  | OL LINE                                |                                 |             |          |  |  | _          | , ,   |                  |    |
| From         To         A         B         C         D         E         F         G         H         TOTAL           07:00 AM          07:15 AM         0         3         0         0         2         1         2         1         9           07:15 AM          07:30 AM         1         3         0         0         5         6         5         3         34           07:45 AM          08:00 AM         13         5         0         0         5         6         5         3         34           07:45 AM          08:00 AM         13         5         0         0         5         10         8         4         45           08:00 AM          08:15 AM         13         7         0         0         6         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         12         12 </td <td></td> <td>_</td> <td>STOP</td> <td></td> <td></td> <td></td> <td></td> <td>W-LEG</td> <td>- 11</td> <td></td> <td><b>***D</b>(D*L)</td> <td>,</td>   |   | _             | STOP   |  |                                 |             |          | W-LEG                                    | - 11   |            | <b>***D</b> (D*L)                           | ,                |    |
| SURVEY   DATA  | T   | IME PER       | IOD  | NORTH                                  | X-WALK                          | EAST X      | -WALK    | SOUTI                                    | H X-WALK   | WEST       | X-WALK                                      |                  |    |
| 07:00 AM          07:15 AM         0         3         0         0         2         1         2         1         9           07:15 AM          07:30 AM         1         3         0         0         3         6         2         2         17           07:30 AM          07:45 AM         12         3         0         0         5         6         5         3         34           07:45 AM          08:00 AM         13         5         0         0         5         10         8         4         45           08:00 AM          08:15 AM         13         7         0         0         5         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         65           08:45 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          07:15 AM         0         3         0         0         2   | From  |               | To   | A                                      | В                               | С           | D        | E  | F  | G          | Н   | TOTAL            |    |
| 07:15 AM          07:30 AM         1         3         0         0         3         6         2         2         17           07:30 AM          07:45 AM         12         3         0         0         5         6         5         3         34           07:45 AM          08:00 AM         13         5         0         0         5         10         8         4         45           08:00 AM          08:15 AM         13         7         0         0         5         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         62           08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         62           08:45 AM          09:00 AM         19         13         0         0         6         12         12         7         62           08:45 AM          07:15 AM         0         3         0         0         2  |   |               |  |  | S                               | URVEY       | Y DAT    | A  |  |            |   |                  |    |
| 07:30 AM          07:45 AM         12         3         0         0         5         6         5         3         34           07:45 AM          08:00 AM         13         5         0         0         5         10         8         4         45           08:00 AM          08:15 AM         13         7         0         0         5         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         62           08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         2         1         2         1         9           07:15 AM          07:15 AM         0         3         0         0         2   | 07:00 AM  |               | 07:15 AM                                       | 0                                      | 3                               | 0           | 0        | 2  | 1  | 2          | 1   | 9                |    |
| 07:45 AM          08:00 AM         13         5         0         0         5         10         8         4         45           08:00 AM          08:15 AM         13         7         0         0         5         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         62           08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         13         13         9         73           TOTAL BY PERIOD           07:00 AM          07:15 AM         0         3         0         0         2         1         9         0         1         8         0         1         8         0         1         8         1         17         0         1         8         1         17         0         1         3         1         17         1  | 07:15 AM  |               | 07:30 AM                                       | 1                                      | 3                               | 0           | 0        | 3  | 6  | 2          | 2   | 17               |    |
| 08:00 AM          08:15 AM         13         7         0         0         5         11         11         6         53           08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         62           08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         13         13         9         73           TOTAL BY PERIOD           07:00 AM          07:15 AM         0         3         0         0         2         1         2         1         9         0         1         8         0         1         8         0         1         8         1         11         1         9         0         1         3         1         11         1         1   | 07:30 AM  |               | 07:45 AM                                       | 12                                     | 3                               | 0           | 0        | 5  | 6  | 5          | 3   | 34               |    |
| 08:15 AM          08:30 AM         17         9         0         0         6         11         12         7         62           08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         13         13         9         73           TOTAL BY PERIOD           TOTAL BY PERIOD <td cols<="" td=""><td>07:45 AM</td><td></td><td>08:00 AM</td><td>13</td><td>5</td><td>0</td><td>0</td><td>5</td><td>10</td><td>8</td><td>4</td><td>45</td></td>  | <td>07:45 AM</td> <td></td> <td>08:00 AM</td> <td>13</td> <td>5</td> <td>0</td> <td>0</td> <td>5</td> <td>10</td> <td>8</td> <td>4</td> <td>45</td> | 07:45 AM      |  | 08:00 AM                               | 13                              | 5           | 0        | 0  | 5  | 10         | 8   | 4                | 45 |
| 08:30 AM          08:45 AM         17         11         0         0         6         12         12         7         65           08:45 AM          09:00 AM         19         13         0         0         6         13         13         9         73           T O T A L         B Y         P E R I O D           07:00 AM          07:15 AM         0         3         0         0         2         1         2         1         9           07:15 AM          07:30 AM         1         0         0         0         1         5         0         1         8           07:30 AM          07:45 AM         11         0         0         0         2         0         3         1         17           07:45 AM          08:00 AM         1         2         0         0         0         4         3         1         11           08:00 AM          08:05 AM         4         2         0         0         0         1         1         9         8         4         45         9         8         4 </td <td>08:00 AM</td> <td></td> <td>08:15 AM</td> <td>13</td> <td>7</td> <td>0</td> <td>0</td> <td>5</td> <td>11</td> <td>11</td> <td>6</td> <td>53</td>   | 08:00 AM  |               | 08:15 AM                                       | 13                                     | 7                               | 0           | 0        | 5  | 11   | 11         | 6   | 53               |    |
| No. 10   N | 08:15 AM  |               | 08:30 AM                                       | 17                                     | 9                               | 0           | 0        | 6  | 11   | 12         | 7   | 62               |    |
| TOTAL BY PERIOD  07:00 AM 07:15 AM 0 3 0 0 2 1 2 1 9  07:15 AM 07:30 AM 1 0 0 0 0 1 5 0 1 8  07:30 AM 07:45 AM 11 0 0 0 0 0 2 0 3 1 17  07:45 AM 08:00 AM 1 2 0 0 0 0 4 3 1 11  08:00 AM 08:30 AM 4 2 0 0 0 1 0 1 0 1 1 9  08:30 AM 08:45 AM 0 2 0 0 0 0 1 0 1 1 9  08:45 AM 08:00 AM 13 5 0 0 0 1 1 0 0 3  08:45 AM 08:00 AM 13 5 0 0 0 5 10 8 4 4 45  07:15 AM 08:30 AM 13 4 0 0 0 3 10 9 5 44  07:30 AM 08:30 AM 16 6 0 0 0 3 5 10 5 45  07:45 AM 08:30 AM 16 6 0 0 0 1 6 7 4 31  08:00 AM 08:30 AM 16 6 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 5 8 0 0 0 1 6 7 4 31  08:00 AM 08:45 AM 5 8 5 8 0 0 0 1 6 7 4 31   | 08:30 AM  |               | 08:45 AM                                       | 17                                     | 11                              | 0           | 0        | 6  | 12   | 12         | 7   | 65               |    |
| 07:00 AM          07:15 AM         0         3         0         0         2         1         2         1         9           07:15 AM          07:30 AM         1         0         0         0         1         5         0         1         8           07:30 AM          07:45 AM         11         0         0         0         2         0         3         1         17           07:45 AM          08:00 AM         1         2         0         0         0         4         3         1         11           08:00 AM          08:15 AM         0         2         0         0         0         1         3         2         8           08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         1         2         8           HOURLY TOTALS           07:00 AM          08:00 AM         13         4         0 <td>08:45 AM</td> <td></td> <td>09:00 AM</td> <td>19</td> <td>13</td> <td>0</td> <td>0</td> <td>6</td> <td>13</td> <td>13</td> <td>9</td> <td>73</td>  | 08:45 AM  |               | 09:00 AM                                       | 19                                     | 13                              | 0           | 0        | 6  | 13   | 13         | 9   | 73               |    |
| 07:15 AM          07:30 AM         1         0         0         0         1         5         0         1         8           07:30 AM          07:45 AM         11         0         0         0         2         0         3         1         17           07:45 AM          08:00 AM         1         2         0         0         0         4         3         1         11           08:00 AM          08:15 AM         0         2         0         0         0         1         3         2         8           08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3           07:00 AM          09:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10  |   |               |  |  | TO                              | ΓΑΙ Β       | Y PER    | IOD                                      |  |            |   |                  |    |
| 07:30 AM          07:45 AM         11         0         0         0         2         0         3         1         17           07:45 AM          08:00 AM         1         2         0         0         0         4         3         1         11           08:00 AM          08:15 AM         0         2         0         0         0         1         3         2         8           08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3         1         1         9         0         3         1         1         9         0         0         1         0         0         1         1         0         0         1         1         0         0         3         1         1         9         8         8         0         0         0         1         1         0         0         3         1         0         0         0<   | 07:00 AM  |               | 07:15 AM                                       | 0                                      | 3                               | 0           | 0        | 2  | 1  | 2          | 1   | 9                |    |
| 07:45 AM          08:00 AM         1         2         0         0         0         4         3         1         11           08:00 AM          08:15 AM         0         2         0         0         0         1         3         2         8           08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3           08:45 AM          09:00 AM         2         2         0         0         0         1         1         2         8           HOURLY TOTALS           07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0  | 07:15 AM  |               | 07:30 AM                                       | 1                                      | 0                               | 0           | 0        | 1  | 5  | 0          | 1   | 8                |    |
| 08:00 AM          08:15 AM         0         2         0         0         0         1         3         2         8           08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3           08:45 AM          09:00 AM         2         2         0         0         0         1         1         2         8           H O U R L Y         T O T A L S           07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0         0         3         5         10         5         45           07:45 AM          08:45 AM         5   | 07:30 AM  |               | 07:45 AM                                       | 11                                     | 0                               | 0           | 0        | 2  | 0  | 3          | 1   | 17               |    |
| 08:15 AM          08:30 AM         4         2         0         0         1         0         1         1         9           08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3           08:45 AM          09:00 AM         2         2         0         0         0         1         1         2         8           H O U R L Y         T O T A L S           07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0         0         3         5         10         5         45           07:45 AM          08:45 AM         5         8         0         0         1         6         7         4         31           08:00 AM          09:00 AM         6  | 07:45 AM  |               | 08:00 AM                                       | 1                                      | 2                               | 0           | 0        | 0  | 4  | 3          | 1   | 11               |    |
| 08:30 AM          08:45 AM         0         2         0         0         0         1         0         0         3           08:45 AM          09:00 AM         2         2         0         0         0         1         1         2         8           H O U R L Y T O T A L S           07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0         0         3         5         10         5         45           07:45 AM          08:45 AM         5         8         0         0         1         6         7         4         31           08:00 AM          09:00 AM         6         8         0         0         1         3         5         5         28  | 08:00 AM  |               | 08:15 AM                                       | 0                                      | 2                               | 0           | 0        | 0  | 1  | 3          | 2   | 8                |    |
| 08:45 AM          09:00 AM         2         2         0         0         0         1         1         2         8           H O U R L Y         T O T A L S           07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0         0         3         5         10         5         45           07:45 AM          08:45 AM         5         8         0         0         1         6         7         4         31           08:00 AM          09:00 AM         6         8         0         0         1         3         5         5         28   | 08:15 AM  |               | 08:30 AM                                       | 4                                      | 2                               | 0           | 0        | 1  | 0  | 1          | 1   | 9                |    |
| HOURLY TOTALS  07:00 AM 08:00 AM 13 5 0 0 0 5 10 8 4 45  07:15 AM 08:15 AM 13 4 0 0 3 10 9 5 44  07:30 AM 08:30 AM 16 6 0 0 0 3 5 10 5 45  07:45 AM 08:45 AM 5 8 0 0 1 6 7 4 31  08:00 AM 09:00 AM 6 8 0 0 1 3 5 5 5 28  | 08:30 AM  |               | 08:45 AM                                       | 0                                      | 2                               | 0           | 0        | 0  | 1  | 0          | 0   | 3                |    |
| 07:00 AM          08:00 AM         13         5         0         0         5         10         8         4         45           07:15 AM          08:15 AM         13         4         0         0         3         10         9         5         44           07:30 AM          08:30 AM         16         6         0         0         3         5         10         5         45           07:45 AM          08:45 AM         5         8         0         0         1         6         7         4         31           08:00 AM          09:00 AM         6         8         0         0         1         3         5         5         28  | 08:45 AM  |               | 09:00 AM                                       | 2                                      | 2                               | 0           | 0        | 0  | 1  | 1          | 2   | 8                |    |
| 07:15 AM      08:15 AM     13     4     0     0     3     10     9     5     44       07:30 AM      08:30 AM     16     6     0     0     3     5     10     5     45       07:45 AM      08:45 AM     5     8     0     0     1     6     7     4     31       08:00 AM      09:00 AM     6     8     0     0     1     3     5     5     28  |   |               |  |  | Н (                             | O U R L Y   | TOTA     | LS                                       |  |            |   |                  |    |
| 07:30 AM      08:30 AM     16     6     0     0     3     5     10     5     45       07:45 AM      08:45 AM     5     8     0     0     1     6     7     4     31       08:00 AM      09:00 AM     6     8     0     0     1     3     5     5     28  | 07:00 AM  |               | 08:00 AM                                       | 13                                     | 5                               | 0           | 0        | 5  | 10   | 8          | 4   | 45               |    |
| 07:45 AM        08:45 AM       5       8       0       0       1       6       7       4       31         08:00 AM        09:00 AM       6       8       0       0       1       3       5       5       28  | 07:15 AM  |               | 08:15 AM                                       | 13                                     | 4                               | 0           | 0        | 3  | 10   | 9          | 5   | 44               |    |
| 08:00 AM 09:00 AM 6 8 0 0 1 3 5 5 <b>28</b>  | 07:30 AM  |               | 08:30 AM                                       | 16                                     | 6                               | 0           | 0        | 3  | 5  | 10         | 5   | 45               |    |
|  | 07:45 AM  |               | 08:45 AM                                       | 5                                      | 8                               | 0           | 0        | 1  | 6  | 7          | 4   | 31               |    |
| Tel: (510) 232-1271 EMAIL: BAYMETRICS@GMAIL.COM  | 08:00 AM  |               |  |  |                                 |             |          |  |  |            | 5   | 28               |    |
|  |   |               | Tel  | : (510) 23                             | 32-1271                         | EMA         | IL: BAYM | IETRICS (                                | @GMAIL.CO  | OM .       |   |                  |    |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 7     | 4     | 11    | 9     | 31    |
| VOLUME BY I | LEG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 13    | 7     | 0     | 11    | 31    |

| PROJEC'  | T:          |                    | TRAFF     | IC COU | INTS IN    | CASTR       | O VALI     | LEY        | ;                   | SURVE      | Y DATE       |            | 1            | /31/201   | <b>7</b> ] | DAY:          | TUESD        | AY         |                 |
|--|-------------|--------------------|-----------|--------|------------|-------------|------------|------------|---------------------|------------|--------------|------------|--------------|-----------|------------|---------------|--------------|------------|-----------------|
| N-S APPI   | ROA         | CH:                | ANITA     | AVENU  | J <b>E</b> |             |            |            | ;                   | SURVE      | Y TIME:      |            | 4            | 4:00 PM   | [          | го            | 6:00         | PM         |                 |
| E-W APP  | ROA         | ACH:               | CASTR     | O VAL  | LEY BO     | ULEVA       | RD         |            |                     | JURISI     | DICTION      | :          | CASTR        | O VAL     | LEY        | FILE:         | 3701005      | -3PM       |                 |
| PEA<br>4:00 PM   | to          | OUR<br>5:00 PM     |           | 73     | 2          | 57          | 0          | 1          | NORTH               |            |              |            | ARR          | rival / 1 | DEPARTU    | JRE VO        | LUMES        |            |                 |
|  |             |                    |           | 70     | - 1        |             |            | !<br>[     |                     |            |              | [          | PHF =        | 0.83      | ]          |               |              |            |                 |
|  |             |                    |           |        | ļ          | <b>(</b>    | $\bigcup $ |            | 1                   |            |              |            |              | 132       | 142        |               |              |            |                 |
|  |             | 6                  | $\bigcap$ |        |            |             |            | •          | 48                  |            |              |            |              | 1         | <b>†</b>   |               | PHF = 0.93   |            |                 |
|  |             | 93                 | _         |        | 21         | 04          | 1          | <b>←</b>   | 684                 |            | F            | 705        |              | <u> </u>  |            |               |              |            |                 |
|  |             | 1218               | <b>→</b>  |        | 21,        | 7 <b>-1</b> | j          | <b>←</b>   | 0                   | *          | L            | 765        | <b>—</b>     |           |            | <b>—</b>      | 732          |            |                 |
|  |             | 9                  |           |        |            |             |            |            | 0                   |            | L            | 1326       | <b>→</b>     | ı         | <b>*</b>   | $\rightarrow$ | 1276         |            |                 |
| CASTRO VALLEY BOULEVARD                                      |             |                    |           |        |            |             |            |            |                     | PHF = 0.89 |              | <u> </u>   |              |           |            |               |              |            |                 |
| * No Left Turn   |             |                    |           |        |            |             |            |            |                     |            |              | j          | 11           | 4         |            |               |              |            |                 |
|  |             |                    | ļ         | ANITA  | AVENUE     | 1           | 1          | _          |                     |            |              |            |              |           | PHF =      | 0.50          |              |            |                 |
| TIME   | P           | ERIOD              |           | NORT   | HBOUN      | D           |            | SOUT       | HBOUNI              | )          |              | EAST       | BOUND        | )         |            | WEST          | BOUND        |            | TOTAL           |
| From   |             | То                 | U-TURN    | LEFT   | THRU       |             | U-TURN     | LEFT       | THRU                |            | U-TURN       | LEFT       | THRU         |           | U-TURN     | LEFT          | THRU         | RIGHT      | 1               |
|  |             |                    |           |        |            |             |            |            | RVEY                |            | АТА          |            |              |           |            |               | Į.           |            | •               |
| 4:00 PM  | to          | 4:15 PM            |           | 0      | 1          | 0           |            | 13         | 0                   | 17         | 1            | 19         | 299          | 2         |            |               | 176          | 11         | 539             |
| 4:15 PM  | to          | 4:30 PM            |           | 0      | 1          | 0           |            | 33         | 0                   | 29         | 2            | 36         | 587          | 3         |            |               | 335          | 23         | 1049            |
| 4:30 PM  | to          | 4:45 PM            |           | 1      | 1          | 1           |            | 44         | 1                   | 47         | 4            | 65         | 877          | 7         |            |               | 500          | 35         | 1583            |
| 4:45 PM  | to          | 5:00 PM            |           | 2      | 1          | 1           |            | 57         | 2                   | 73         | 6            | 93         | 1218         | 9         |            |               | 684          | 48         | 2194            |
| 5:00 PM  | to          | 5:15 PM            |           | 2      | 2          | 2           |            | 74         | 2                   | 84         | 6            | 112        | 1466         | 14        |            |               | 881          | 60         | 2705            |
| 5:15 PM  | to          | 5:30 PM            |           | 3      | 2          | 2           |            | 85         | 2                   | 99         | 7            | 139        | 1709         | 17        |            |               | 1069         | 73         | 3207            |
| 5:30 PM<br>5:45 PM   | to          | 5:45 PM<br>6:00 PM |           | 3      | 2 2        | 2 2         |            | 104<br>117 | 3 4                 | 124<br>141 | 8            | 167<br>185 | 1963<br>2205 | 18<br>19  |            |               | 1284<br>1458 | 86<br>100  | 3764<br>4245    |
| 3.43 FWI   | to          | 0.00 FWI           |           | 3      | 2          |             |            | TOT        |                     |            | ERIO         |            | 2203         | 19        |            |               | 1436         | 100        | 4243            |
| 4:00 PM  | to          | 4:15 PM            | 0         | 0      | 1          | 0           | 0          | 13         | 0                   | 17         | 1            | 19         | 299          | 2         | 0          | 0             | 176          | 11         | 539             |
| 4:15 PM  | to          | 4:30 PM            | 0         | 0      | 0          | 0           | 0          | 20         | 0                   | 12         | 1            | 17         | 288          | 1         | 0          | 0             | 159          | 12         | 510             |
| 4:30 PM  | to          | 4:45 PM            | 0         | 1      | 0          | 1           | 0          | 11         | 1                   | 18         | 2            | 29         | 290          | 4         | 0          | 0             | 165          | 12         | 534             |
| 4:45 PM  | to          | 5:00 PM            | 0         | 1      | 0          | 0           | 0          | 13         | 1                   | 26         | 2            | 28         | 341          | 2         | 0          | 0             | 184          | 13         | 611             |
| 5:00 PM  | to          | 5:15 PM            | 0         | 0      | 1          | 1           | 0          | 17         | 0                   | 11         | 0            | 19         | 248          | 5         | 0          | 0             | 197          | 12         | 511             |
| 5:15 PM  | to          | 5:30 PM            | 0         | 1      | 0          | 0           | 0          | 11         | 0                   | 15         | 1            | 27         | 243          | 3         | 0          | 0             | 188          | 13         | 502             |
| 5:30 PM  | to          | 5:45 PM            | 0         | 0      | 0          | 0           | 0          | 19         | 1                   | 25         | 1            | 28         | 254          | 1         | 0          | 0             | 215          | 13         | 557             |
| 5:45 PM  | to          | 6:00 PM            | 0         | 0      | 0          | 0           | 0          | 13         | 1<br>1 <b>D 1 V</b> | 17<br>T.   | 1<br>7 T A I | 18<br>C    | 242          | 1         | 0          | 0             | 174          | 14         | 481             |
| 4.00 73 5  |             | 5.00 P1 -          |           |        | ,          | ,           |            |            | JRLY                |            | TAL          |            | 1010         |           |            |               | (0:          | 40         | 2101            |
| 4:00 PM  |             | 5:00 PM            | 0         | 2 2    | 1          | 1 2         | 0          | 57<br>61   | 2 2                 | 73<br>67   | 6<br>5       | 93         | 1218         | 9         | 0          | 0             | 684<br>705   | 48<br>49   | 2194            |
| 4:15 PM<br>4:30 PM   |             | 5:15 PM<br>5:30 PM | 0         | 3      | 1          | 2           | 0          | 61<br>52   | 2                   | 67<br>70   | 5            | 93<br>103  | 1167<br>1122 | 12<br>14  | 0          | 0             | 705<br>734   | 49<br>50   | 2166<br>2158    |
| 4:45 PM  | to          | 5:45 PM            | 0         | 2      | 1          | 1           | 0          | 60         | 2                   | 70<br>77   | 4            | 103        | 1086         | 11        | 0          | 0             | 784<br>784   | 51         | 2181            |
| 5:00 PM  | to          | 6:00 PM            | 0         | 1      | 1          | 1           | 0          | 60         | 2                   | 68         | 3            | 92         | 987          | 10        | 0          | 0             | 774          | 52         | 2051            |
|  |             |                    |           |        |            |             | P E        | AK         | HOU                 |            | UMM          |            |              |           |            |               |              |            |                 |
| 4:00 PM  | to          | 5:00 PM            |           |        | HBOUN      |             |            |            | HBOUND              |            |              |            | BOUND        |           |            |               | BOUND        |            | TOTAL           |
| 176  | OL LP       | 4E                 | NBU       | NBL    | NBT        | NBR         | SBU        | SBL        | SBT                 | SBR        | EBU          | EBL        | EBT          | EBR       | WBU        | WBL           | WBT          | WBR        | 2104            |
| PHF BY   | OLUN<br>MOV |                    | 0.00      | 0.50   | 0.25       | 0.25        | 0.00       | 57<br>0.71 | 0.50                | 73<br>0.70 | 6<br>0.75    | 93<br>0.80 | 1218<br>0.89 | 9<br>0.56 | 0.00       | 0.00          | 0.93         | 48<br>0.92 | 2194<br>OVERALL |
| PHF BY   |             |                    | 0.00      |        | 50         | 0.20        | 0.00       |            | .83                 | 0.70       | 0.75         | 0.00       |              | 0.50      | 0.00       | 0.00          |              | 0.72       | 0.90            |
|  | CYC         |                    |           |        | 0          |             |            |            | 1                   |            |              | 3          |              |           |            | 3             |              |            | 7               |
| PEDESTRIAN         6         6           N-LEG         S-LEG |             |                    |           |        |            |             | 2.<br>E I  |            |                     |            | 2<br>W I     |            |              | 64        |            |               |              |            |                 |
| PEDESTRIAN BY LEG: 22 30                                     |             |                    |           |        |            |             | E-L        |            |                     |            | <b>W-I</b>   |            |              | 64        |            |               |              |            |                 |
| TEL: (510) 232 - 1271 EMAII                                  |             |                    |           |        | MAJL:      | BAYM        |            |            | IAIL.C              | OM         |              |            |              | <u> </u>  |            |               |              |            |                 |
| <b></b>  |             |                    |           |        | (          | ,           | /          |            |                     |            | /-           |            | <u></u>      |           |            |               |              |            |                 |

### BICYCLE TURNING MOVEMENT SUMMARY

| PROJECT  | S APPROACH: ANITA AVENUE  |         |        |        |        |          |             |      |               |             | Y DAT                           | Е:     | 1     | /31/201 | 7                    | DAY:  | TUESD   | AY    |                   |
|--|---|---------|--------|--------|--------|----------|-------------|------|---------------|-------------|---------------------------------|--------|-------|---------|----------------------|-------|---------|-------|-------------------|
| N-S APPR   | APPROACH: ANITA AVENUE APPROACH: CASTRO VALLEY BOULEVARD                                    |         |        |        |        |          |             |      |               | SURVE       | Y TIMI                          | Ξ:     | 4     | 4:00 PM | [                    | TO    | 6:00    | PM    |                   |
| E-W APPI   | ROA   | CH:     | CASTR  | O VALI | LEY BO | ULEVA    | RD          |      |               | JURISI      | OICTIO                          | N:     | CASTR | O VALI  | LEY                  | FILE: | 370100  | 5-3PM |                   |
| PEAI 4:00 PM   | PEAK HOUR 4:00 PM to 5:00 PM  0 0 1 0  NORTH  O 0 0 1 0  CASTRO VALLEY BOULEVARD  0 0 0 0 0 |         |        |        |        |          |             |      |               |             |                                 |        |       |         | PEAK<br>L BICYO<br>1 | HOUR  | LUMES ] | 7 3 4 | END<br> <br> <br> |
| 0 0 0 0   TOTAL S-END 0   TOTAL STROUND   TO |   |         |        |        |        |          |             |      |               |             |                                 |        |       | тоты    |                      |       |         |       |                   |
|  | PE  |         | II THE |        |        |          | II THE PART |      |               |             | II THINK                        | 1      |       |         | II TIDAY             |       |         |       | TOTAL             |
| From   |   | То      | U-TURN | LEFT   | THRU   | RIGHT    | U-TURN      | LEFT | THRU<br>R V E |             | u-turn<br><b>) A</b> T <i>A</i> | LEFT   | THRU  | RIGHT   | U-TURN               | LEFT  | THRU    | RIGHT |                   |
| 4:00 DM  | 4.  | 4.15 DM | 0      | 0      | 0      | 0        | 0           |      |               |             |                                 |        | 2     | 0       | 0                    | 0     | 1       | 0     | 4                 |
|  | to  | 4:15 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 2     | 0       | 0                    | 0     | 1       | 0     | 4                 |
|  | to  | 4:30 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 2     | 0       | 0                    | 0     | 1       | 0     | 4                 |
|  | to  | 4:45 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 3     | 0       | 0                    | 0     | 1       | 0     | 5                 |
|  | to  | 5:00 PM | 0      | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 3     | 0       | 0                    | 0     | 3       | 0     | 7                 |
|  | to  | 5:15 PM | 0      | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 3     | 0       | 0                    | 0     | 4       | 0     | 8                 |
|  | to  | 5:30 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 1           | 0                               | 0      | 3     | 0       | 0                    | 0     | 4       | 0     | 9                 |
|  | to  | 5:45 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 1           | 0                               | 0      | 3     | 0       | 0                    | 0     | 5       | 0     | 10                |
| 5:45 PM  | to  | 6:00 PM | 0      | 0      | 0      | 0        | 0           | ТОТ  | 0<br>A T      | 2<br>D.V. D | 0<br>E D I 4                    | 0<br>0 | 3     | 0       | 0                    | 0     | 6       | 0     | 12                |
| 4.00 ====  |   |         |        |        | -      | -        |             | TOT  |               |             | ERI                             |        | _     | -       |                      |       |         |       |                   |
| 4:00 PM  |   | 4:15 PM | 0      | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 2     | 0       | 0                    | 0     | 1       | 0     | 4                 |
|  | to  | 4:30 PM |        | 0      | 0      | 0        | 0           | 0    | 0             | 0           | 0                               | 0      | 0     | 0       | 0                    | 0     | 0       | 0     | 0                 |
|  | to  | 4:45 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 0           | 0                               | 0      | 1     | 0       | 0                    | 0     | 0       | 0     | 1                 |
|  | to  | 5:00 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 0           | 0                               | 0      | 0     | 0       | 0                    | 0     | 2       | 0     | 2                 |
|  | to  | 5:15 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 0           | 0                               | 0      | 0     | 0       | 0                    | 0     | 1       | 0     | 1                 |
|  | to  | 5:30 PM |        | 0      | 0      | 0        | 0           | 0    | 0             | 1           | 0                               | 0      | 0     | 0       | 0                    | 0     | 0       | 0     | 1                 |
|  |   |         |        |        |        |          |             | 0    | 0             | 0           | 0                               | 0      | 0     | 0       | 0                    | 1     | 0       | 1     |                   |
| 5:45 PM  | to  | 6:00 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 1           | 0                               | 0      | 0     | 0       | 0                    | 0     | 1       | 0     | 2                 |
|  |   |         |        |        |        |          |             |      |               |             | ЭΤΑΙ                            | _ S    |       |         |                      |       |         |       | 1                 |
| 4:00 PM  | to  | 5:00 PM |        | 0      | 0      | 0        | 0           | 1    | 0             | 0           | 0                               | 0      | 3     | 0       | 0                    | 0     | 3       | 0     | 7                 |
| 4:15 PM  | to  | 5:15 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 0           | 0                               | 0      | 1     | 0       | 0                    | 0     | 3       | 0     | 4                 |
| 4:30 PM  | to  | 5:30 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 1           | 0                               | 0      | 1     | 0       | 0                    | 0     | 3       | 0     | 5                 |
| 4:45 PM  | to  | 5:45 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 1           | 0                               | 0      | 0     | 0       | 0                    | 0     | 4       | 0     | 5                 |
| 5:00 PM  | to  | 6:00 PM | 0      | 0      | 0      | 0        | 0           | 0    | 0             | 2           | 0                               | 0      | 0     | 0       | 0                    | 0     | 3       | 0     | 5                 |
|  |   |         |        |        | TEL: ( | (510) 23 | 32 - 127    | 1    |               | EMAIL:      | BAYN                            | 4ETRIC | :S@GM | AIL.C   | UN                   |       |         |       |                   |
|  |   |         |        |        |        |          |             |      |               |             |                                 |        |       |         |                      |       |         |       |                   |

| 4:00 PM to 5:00 PM |    |    |    |    |       |
|--------------------|----|----|----|----|-------|
| APPROACH VOLUME    | NB | SB | EB | WB | TOTAL |
| BICYCLE            | 0  | 1  | 3  | 3  | 7     |

### PEDESTRIAN MOVEMENT SUMMARY

| NA APPROACH:   ANTHA AVENUE  | PROJECT   | :             | TRAFFIC C   | OUNTS IN         | CASTRO V | ALLEY     |          |  | SURVEY D            | ATE:       | 1/31/2017  |                   |
|--|-----------|---------------|---|------------------|----------|-----------|----------|--|---------------------|------------|------------|-------------------|
| PEAK HOUNGED   PEAK | N-S APPRO | OACH:         | ANITA AVI   | ENUE             |          |           |          |  | DAY:                |            | TUESDAY    |                   |
| PEAK HOUNG   10  | E-W APPR  | OACH:         | CASTRO V  | ALLEY BO         | OULEVARD |           |          |  | JURISDIC'           | TION:      | CASTRO V   | ALLEY             |
| No   | SURVEY P  | PERIOD:       | 4:00  | PM               | TO       | 6:00      | ) PM     |  | FILE:               |            | 3701005-3P | M                 |
| TIME PERIOD NORTH X-WALK EAST X-WALK SOUTH X-WALK PFOM TO A B C D E F G H TOTAL    SUR V E Y D A T A   |           | 6 H ALLEY BOU | 05:00 PM  6  GULEVARD  13  17  CROSSWALK SIDEWALK | FANITA AVI       | • E      | 6<br>C    |          | W-LEG<br>G&<br>BY LEG:<br>N-LEG<br>S-LEG | 30 E&F S-LEG  22 30 | RIAN VOLUM | N-LEG      | E-LEG  ION:  6  6 |
| TIME   PERIOD   NORTH X-WALK   EAST X-WALK   SOUTH X-WALK   From   To   A   B   C   D   E   F   G   H   TOTAL  |           | _             |   | COL LINE         |          |           |          |  |                     | _          | , ,        |                   |
| From   |           | _             | 5101  |                  |          |           |          | 223                                      |                     |            | ( )        |                   |
| SURVEY   DATA  | T         | IME PER       | IOD   | NORTH            | I X-WALK | EAST X    | K-WALK   | SOUTI                                    | H X-WALK            | WEST       | X-WALK     |                   |
| 04:00 PM 04:15 PM 1 5 0 0 0 3 2 1 1 1 3 13 28 04:15 PM 04:30 PM 4 8 0 0 0 4 8 14 4 4 4 49 04:30 PM 05:00 PM 6 16 0 0 13 17 6 6 6 64 05:00 PM 05:15 PM 10 16 0 0 0 15 18 6 9 74 05:30 PM 05:30 PM 14 19 0 0 0 19 25 10 14 101 05:30 PM 05:45 PM 16 23 0 0 22 27 15 17 120 05:45 PM 06:00 PM 17 29 0 0 0 25 29 18 17 135 17 135 17 135 18 17 135 18 18 17 135 18 18 17 135 18 18 17 135 18 18 18 17 135 18 18 18 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18  | From      |               | To  | $\boldsymbol{A}$ |          |           |          |  | F                   | G          | H          | TOTAL             |
| 04:15 PM          04:30 PM         4         8         0         0         4         8         1         3         28           04:30 PM          04:45 PM         4         15         0         0         8         14         4         4         49           04:45 PM          05:00 PM         6         16         0         0         13         17         6         6         64           05:00 PM          05:15 PM         10         16         0         0         15         18         6         9         74           05:15 PM          05:30 PM         14         19         0         0         19         25         10         14         101           05:30 PM          05:45 PM         16         23         0         0         22         27         15         17         120           05:45 PM          06:00 PM         17         29         0         0         2         1         1         13           04:00 PM          04:15 PM         1         5         0         0         3         2  |           |               |   |                  | S        | URVE      | Y DAT    | A  |                     |            |            |                   |
| 04:30 PM          04:45 PM         4         15         0         0         8         14         4         4         49           04:45 PM          05:00 PM         6         16         0         0         13         17         6         6         64           05:00 PM          05:15 PM         10         16         0         0         15         18         6         9         74           05:15 PM          05:30 PM         14         19         0         0         19         25         10         14         101           05:30 PM          05:45 PM         16         23         0         0         22         27         15         17         120           05:45 PM          06:00 PM         17         29         0         0         22         27         15         17         120           04:00 PM          06:00 PM         1         5         0         0         3         2         1         1         13         13         17         12         15         14         1         13         13         14 <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td>1</td> <td></td> <td>13</td>   |           |               |   | 1                |          |           |          | 3  |                     | 1          |            | 13                |
| 04:45 PM          05:00 PM         6         16         0         0         13         17         6         6         64           05:00 PM          05:15 PM         10         16         0         0         15         18         6         9         74           05:15 PM          05:30 PM         14         19         0         0         19         25         10         14         101           05:30 PM          05:45 PM         16         23         0         0         22         27         15         17         120           05:45 PM          06:00 PM         17         29         0         0         22         27         15         17         120           05:45 PM          06:00 PM         1         5         0         0         3         2         1         1         13         135           04:00 PM          04:35 PM         1         5         0         0         3         2         1         1         13         13         1         21         1         0         0         1         6  |           |               |   |                  |          |           |          |  |                     | -          |            |                   |
| 05:00 PM   |           |               |   |                  |          |           |          |  |                     |            |            | 49                |
| 05:15 PM          05:30 PM         14         19         0         0         19         25         10         14         101           05:30 PM          05:45 PM         16         23         0         0         22         27         15         17         120           05:45 PM          06:00 PM         17         29         0         0         25         29         18         17         135           TOTAL BY PERIOD           TOTAL BY PERIOD           04:00 PM          04:15 PM         1         5         0         0         3         2         1         1         13           04:01 PM          04:30 PM         3         3         0         0         1         6         0         2         15           04:30 PM          04:45 PM         0         7         0         0         4         6         3         1         21         0         0         4         6         3         1         21         0         0         5         3         2         2         15         0         0         5 </td <td></td> <td></td> <td></td> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td></td> <td></td>  |           |               |   | 6                |          |           |          |  |                     | 6          |            |                   |
| 05:30 PM   | 05:00 PM  |               | 05:15 PM  | 10               | 16       | 0         | 0        | 15                                       | 18                  | 6          | 9          | 74                |
| O5:45 PM   | 05:15 PM  |               | 05:30 PM  | 14               | 19       | 0         | 0        | 19                                       | 25                  | 10         | 14         | 101               |
| TOTAL BY PERIOD           04:00 PM          04:15 PM         1         5         0         0         3         2         1         1         13           04:15 PM          04:30 PM         3         3         0         0         1         6         0         2         15           04:30 PM          04:45 PM         0         7         0         0         4         6         3         1         21           04:45 PM          05:00 PM         2         1         0         0         5         3         2         2         15           05:00 PM          05:15 PM         4         0         0         0         2         1         0         3         10           05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6   | 05:30 PM  |               | 05:45 PM  | 16               | 23       | 0         | 0        | 22                                       | 27                  | 15         | 17         | 120               |
| 04:00 PM          04:15 PM         1         5         0         0         3         2         1         1         13           04:15 PM          04:30 PM         3         3         0         0         1         6         0         2         15           04:30 PM          04:45 PM         0         7         0         0         4         6         3         1         21           04:45 PM          05:00 PM         2         1         0         0         5         3         2         2         15           05:00 PM          05:15 PM         4         0         0         0         2         1         0         3         10           05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         13         17 <td>05:45 PM</td> <td></td> <td>06:00 PM</td> <td>17</td> <td></td> <td></td> <td></td> <td>_</td> <td>29</td> <td>18</td> <td>17</td> <td>135</td>   | 05:45 PM  |               | 06:00 PM  | 17               |          |           |          | _  | 29                  | 18         | 17         | 135               |
| 04:15 PM        04:30 PM       3       3       0       0       1       6       0       2       15         04:30 PM        04:45 PM       0       7       0       0       4       6       3       1       21         04:45 PM        05:00 PM       2       1       0       0       5       3       2       2       15         05:00 PM        05:15 PM       4       0       0       0       2       1       0       3       10         05:15 PM        05:30 PM       4       3       0       0       4       7       4       5       27         05:30 PM        05:45 PM       2       4       0       0       3       2       5       3       19         05:45 PM        06:00 PM       1       6       0       0       3       2       3       0       15         H O U R L Y       T O T A L S         04:00 PM        05:00 PM       6       16       0       0       13       17       6       6       64         04:15 P   |           |               |   |                  | TO       |           |          | 1 O D                                    |                     | 1          |            |                   |
| 04:30 PM          04:45 PM         0         7         0         0         4         6         3         1         21           04:45 PM          05:00 PM         2         1         0         0         5         3         2         2         15           05:00 PM          05:15 PM         4         0         0         0         2         1         0         3         10           05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         3         2         3         0         15           HOURLY TOTALS           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:05 PM          05:15 PM         9         11 <t< td=""><td>04:00 PM</td><td></td><td>04:15 PM</td><td>1</td><td>5</td><td>0</td><td>0</td><td>3</td><td>2</td><td>1</td><td>1</td><td>13</td></t<>   | 04:00 PM  |               | 04:15 PM  | 1                | 5        | 0         | 0        | 3  | 2                   | 1          | 1          | 13                |
| 04:45 PM          05:00 PM         2         1         0         0         5         3         2         2         15           05:00 PM          05:15 PM         4         0         0         0         2         1         0         3         10           05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         3         2         5         3         19           HOURLY TOTALS           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:00 PM          05:15 PM         9         11         0         0         12         16         5         8         61           04:30 PM          05:30 PM         10         11   | 04:15 PM  |               | 04:30 PM  | 3                | 3        | 0         | 0        | 1  | 6                   | 0          | 2          | 15                |
| 05:00 PM          05:15 PM         4         0         0         0         2         1         0         3         10           05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         3         2         3         0         15           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           05:00 PM         9         11  | 04:30 PM  |               | 04:45 PM  | 0                | 7        | 0         | 0        | 4  | 6                   | 3          | 1          | 21                |
| 05:15 PM          05:30 PM         4         3         0         0         4         7         4         5         27           05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         3         2         3         0         15           HOURLY TOTALS           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:00 PM          05:15 PM         9         11         0         0         12         16         5         8         61           04:30 PM          05:30 PM         10         11         0         0         15         17         9         11         73           04:45 PM          05:45 PM         12         8         0         0         14         13         11         13         71           05:00 PM          06:00 PM         11         13 </td <td>04:45 PM</td> <td></td> <td>05:00 PM</td> <td>2</td> <td>1</td> <td>0</td> <td>0</td> <td>5</td> <td>3</td> <td>2</td> <td>2</td> <td>15</td>  | 04:45 PM  |               | 05:00 PM  | 2                | 1        | 0         | 0        | 5  | 3                   | 2          | 2          | 15                |
| 05:30 PM          05:45 PM         2         4         0         0         3         2         5         3         19           05:45 PM          06:00 PM         1         6         0         0         3         2         3         0         15           H O U R L Y         T O T A L S           H O U R L Y         T O T A L S           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:15 PM          05:15 PM         9         11         0         0         12         16         5         8         61           04:30 PM          05:30 PM         10         11         0         0         15         17         9         11         73           04:45 PM          05:45 PM         12         8         0         0         14         13         11         13         71           05:00 PM          06:00 PM         11         13         0         0         12         12         12         11         71 </td <td>05:00 PM</td> <td></td> <td>05:15 PM</td> <td>4</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>1</td> <td>0</td> <td>3</td> <td>10</td>   | 05:00 PM  |               | 05:15 PM  | 4                | 0        | 0         | 0        | 2  | 1                   | 0          | 3          | 10                |
| 05:45 PM          06:00 PM         1         6         0         0         3         2         3         0         15           H O U R L Y T O T A L S           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:15 PM          05:15 PM         9         11         0         0         12         16         5         8         61           04:30 PM          05:30 PM         10         11         0         0         15         17         9         11         73           04:45 PM          05:45 PM         12         8         0         0         14         13         11         13         71           05:00 PM          06:00 PM         11         13         0         0         12         12         12         11         71  | 05:15 PM  |               | 05:30 PM  | 4                | 3        | 0         | 0        | 4  | 7                   | 4          | 5          | 27                |
| HOURLY TOTALS           04:00 PM          05:00 PM         6         16         0         0         13         17         6         6         64           04:15 PM          05:15 PM         9         11         0         0         12         16         5         8         61           04:30 PM          05:30 PM         10         11         0         0         15         17         9         11         73           04:45 PM          05:45 PM         12         8         0         0         14         13         11         13         71           05:00 PM          06:00 PM         11         13         0         0         12         12         12         11         71  | 05:30 PM  |               | 05:45 PM  | 2                | 4        | 0         | 0        | 3  | 2                   | 5          | 3          | 19                |
| 04:00 PM        05:00 PM       6       16       0       0       13       17       6       6       64         04:15 PM        05:15 PM       9       11       0       0       12       16       5       8       61         04:30 PM        05:30 PM       10       11       0       0       15       17       9       11       73         04:45 PM        05:45 PM       12       8       0       0       14       13       11       13       71         05:00 PM        06:00 PM       11       13       0       0       12       12       12       11       71  | 05:45 PM  |               | 06:00 PM  | 1                |          |           |          |  | 2                   | 3          | 0          | 15                |
| 04:15 PM      05:15 PM     9     11     0     0     12     16     5     8     61       04:30 PM      05:30 PM     10     11     0     0     15     17     9     11     73       04:45 PM      05:45 PM     12     8     0     0     14     13     11     13     71       05:00 PM      06:00 PM     11     13     0     0     12     12     12     11     71   |           |               |   |                  | Н (      | ) U R L Y | ТОТА     | LS                                       |                     |            |            |                   |
| 04:30 PM      05:30 PM     10     11     0     0     15     17     9     11     73       04:45 PM      05:45 PM     12     8     0     0     14     13     11     13     71       05:00 PM      06:00 PM     11     13     0     0     12     12     12     11     71  | 04:00 PM  |               | 05:00 PM  | 6                | 16       | 0         | 0        | 13                                       | 17                  | 6          | 6          | 64                |
| 04:45 PM          05:45 PM         12         8         0         0         14         13         11         13         71           05:00 PM          06:00 PM         11         13         0         0         12         12         12         11         71   | 04:15 PM  |               | 05:15 PM  | 9                | 11       | 0         | 0        | 12                                       | 16                  | 5          | 8          | 61                |
| 05:00 PM 06:00 PM 11 13 0 0 12 12 12 11 <b>71</b>  | 04:30 PM  |               | 05:30 PM  | 10               | 11       | 0         | 0        | 15                                       | 17                  | 9          | 11         | 73                |
|  | 04:45 PM  |               | 05:45 PM  | 12               | 8        | 0         | 0        | 14                                       | 13                  | 11         | 13         | 71                |
| Tel: (510) 232-1271 EMAIL: BAYMETRICS@GMAIL.COM  | 05:00 PM  |               |   |                  |          |           |          |  |                     |            | 11         | 71                |
|  |           |               | Tel   | $2:(510)\ 23$    | 32-1271  | EMA       | IL: BAYM | ETRICS                                   | @GMAIL.CO           | OM         |            |                   |

| 12:00 AM    | to       | 12:00 AM |       |       |       |       |       |
|-------------|----------|----------|-------|-------|-------|-------|-------|
| VOLUME BY I | DIRECTIO | N        | NB    | SB    | EB    | WB    | TOTAL |
| PEDESTRIAN  |          |          | 6     | 6     | 23    | 29    | 64    |
| VOLUME BY I | LEG      |          | N-LEG | S-LEG | E-LEG | W-LEG | TOTAL |
| PEDESTRIAN  |          |          | 22    | 30    | 0     | 12    | 64    |