

Saber Hotel and Gas Station Project

Traffic Analysis

Prepared for:

Arrow Plaza, LLC
18497 Valley Boulevard
Bloomington, CA 92316

Prepared by:

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June 2022

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I INTRODUCTION

This traffic analysis evaluates the traffic conditions associated with the proposed Saber Hotel and Gas Station project (herein referred to as “the Project”) located at 18497 Valley Boulevard (APN 0252-161-43,45) in Bloomington, CA in the County of San Bernardino. **Figure 1-1** shows the location of the project site within the study area. The traffic analyses have been prepared in accordance with the *Congestion Management Program for San Bernardino County, San Bernardino County Transportation Impact Study Guidelines, July 9, 2019 (County Guidelines)* and consistent with the countywide goals contained in the San Bernardino Countywide Plan.

I.1 Project Description

The proposed Project is located on the southwest corner of the Linden Avenue & Valley Boulevard intersection. The site is currently zoned as Valley Corridor Commercial District (VC/COM). The Project proposes to construct a 5-story, 87-room hotel, a gas station with a 2,400 square-foot (sf) convenience store, and a 2,500 sf fast-food with drive-through lane.

Access is being proposed through new driveways off Valley Avenue and Linden Avenue. A total of 135 surface parking spaces would be provided on-site, which include 5 handicap accessible spaces, 6 clean air/vanpool/EV spaces, and 10 EV charging spaces. The Project is estimated to be in operation in 2023. **Figure 1-2** illustrates the Project site plan.



LEGEND

★ Project Site

Saber Hotel and Gas Station



Figure 1-1
Project Vicinity Map

Proposed Hotel and Gas Station For:
Arrow Plaza LLC
 18497 Valley Blvd, Bloomington, CA 92316



NOT A PART
 ZONING: VC/COM
 DESCRIPTION: RETAIL STORE
 CLASS: COMMERCIAL

NOT A PART
 ZONING: VC/COM
 DESCRIPTION: RETAIL STORE
 CLASS: COMMERCIAL

OWNER: ARROW PLAZA LLC
 SABIH AWAD
 sabihawad314@gmail.com
 (909) 919-3346

PROJECT ADDRESS: 18497 VALLEY BLVD,
 BLOOMINGTON, CA 92316

ARCHITECT: ANDRESEN ARCHITECTURE INC.
 17087 ORANGE WAY
 FONTANA, CA 92335
 (909) 355-6588
 doug.andresen@aarfirm.com

CIVIL: HP ENGINEERING, INC.
 1465 CRESTVIEW ROAD
 REDLANDS, CA 92374
 HENRY FRODOLZ
 (909) 336-8239
 hpf@hpengineer.com

LANDSCAPING: RICHARD POPE AND ASSOCIATES
 158 SOUTH 97 STREET, SUITE 103
 SAN BERNARDINO, CA 92408
 RICHARD POPE
 (909) 888-6568
 rpa.rpa@wecdn.net

APN: 0520-161-43-45

ZONING: VALLEY CORRIDOR COMMERCIAL DISTRICT (VC/COM)

OCCUPANCY: HOTEL, A.C. 1-1
 RESTAURANT, A-2

CONSTRUCTION: 1785

FIRE SPINNEERS: REQUIRED

PROJECT DESCRIPTION: CONSTRUCT 5-STORY HOTEL INCLUDING 80 ROOMS AND 7 SUITES, FAST FOOD RESTAURANT WITH DRIVE-THRU, CANTINE AND GAS STATION ON VACANT LOT

TOTAL LOT AREA:
 APN: 0520-161-43-45 9,963.92 SQ. FT. (0.22 AC)
 OFFICE LOT AREA 121,068.8 SQ. FT. (2.78 AC)
 (BEFORE DEDICATION)
 GROSS LOT AREA 116,742.66 SQ. FT. (2.68 AC)
 (AFTER DEDICATION)

HOTEL FOOTPRINT AREA: 11,877 SQ. FT.
CANTINE FOOTPRINT AREA: 2,300 SQ. FT.
RESTAURANT FOOTPRINT AREA: 4,577 SQ. FT.
TOTAL FOOTPRINT AREA: 18,754 SQ. FT.

LOT COVERAGE: 14.4%
 (2,400 x 3,300 = 7,920,000 SQ. FT.)

NET LOT AREA: 98,985.96 SQ. FT. (2.26 AC)
LANDSCAPE AREA: 10,322.52 SQ. FT. (23.74 AC)
HARDSCAPE AREA: 82,663.41 SQ. FT. (1.89 AC)

BUILDING HEIGHT: 60 FEET / 5 STORES MAXIMUM

BUILDING AREA:
HOTEL GROSS FLOOR AREA: 52,783 SQ. FT. (87 GUEST ROOMS)
FIRST FLOOR: 11,877 SQ. FT. (18 ROOMS)
SECOND FLOOR: 10,516 SQ. FT. (20 ROOMS)
THIRD FLOOR: 10,516 SQ. FT. (20 ROOMS)
FOURTH FLOOR: 10,516 SQ. FT. (20 ROOMS)
FIFTH FLOOR: 9,588 SQ. FT. (7 SUITES)

HOTEL AREA: 52,783 SQ. FT.
RESTAURANT AREA: 4,577 SQ. FT.
CANTINE AREA: 2,300 SQ. FT.
TOTAL CONDITIONED AREA: 59,660 SQ. FT.

FUEL PUMP CANOPY AREA: 3,192 SQ. FT.
HOTEL DRIVE-THRU CANOPY AREA: 3,271 SQ. FT.
GAS PUMP CANOPY AREA: 380 SQ. FT.
TOTAL CANOPY AREA: 6,843 SQ. FT.

PARKING:
STALLS (BY FLOOR): 87 STALLS
STALLS (TOTAL): 87 STALLS
TOTAL HOTEL PARKING: 87 STALLS
RESTAURANT (1200 VEH): 20 STALLS
CANTINE (2400 VEH): 10 STALLS
TOTAL REQUIRED: 117 STALLS
TOTAL PARKING PROVIDED: 137 STALLS
W/ HANDICAP ACCESSIBLE SPACES: 6 CLEAN AIR / VAMPPOOL / EV SPACES

EXISTING LAND USE ZONING FOR 80-AC VACANT PROPERTY:
 - NORTH OF PROPERTY: ZONING: VC/COM DESCRIPTION: RETAIL STORE, CLASS: COMMERCIAL, (ACROSS VALLEY BLVD.)
 - WEST OF PROPERTY: ZONING: VC/RE DESCRIPTION: VACANT LAND, CLASS: COMMERCIAL
 - EAST OF PROPERTY: ZONING: VC/COM DESCRIPTION: VACANT LAND, CLASS: COMMERCIAL
 - SOUTH OF PROPERTY: ZONING: VC/COM DESCRIPTION: MINI STORAGE WAREHOUSE, CLASS: COMMERCIAL

Sequence of Drawings - DR

| Number | Description |
|--------|-----------------------------|
| PL1 | Site Plan |
| PL2 | Proposed P&S & C-Store |
| PL3 | Proposed Gas Station Canopy |
| PL4 | Proposed Hotel Plans |
| PL5 | Proposed Hotel Elevations |
| G-1 | Primary Grading Plan |
| LC1 | Conceptual Landscaping Plan |

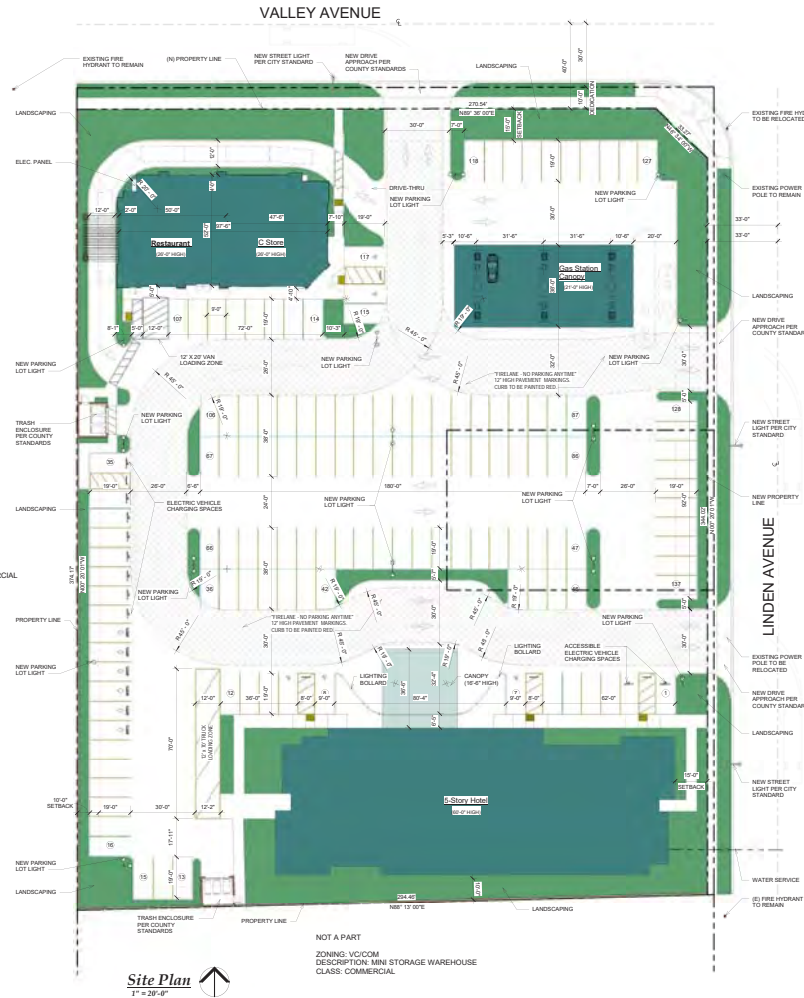
Proposed Hotel and Gas Station For:
Arrow Plaza LLC
 18497 Valley Blvd, Bloomington, CA 92316

11 Apr. 2022
 21-4377



Site Plan

PL1



Vicinity Map

Site Plan
 T = 20'-0"

C:\Users\Andresen\Documents\Projects\2020-2023\Projects\4 - Projects\2020-2023\2021\21-4377 Saber Hotel & Gas Station\Rev11\21-4377 Saber Hotel & Gas Station.rvt
 4/1/2022 2:15:02 PM
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Saber Hotel and Gas Station

Figure I-2
 Site Plan

2 ANALYSIS APPROACH AND METHODOLOGY

This section summarizes the analysis approach and methodology used to evaluate the study intersection associated with the Project. It should be noted that the approach was based on the guidelines outlined in the *County Guidelines*.

2.1 Study Area

This traffic analysis addresses potential operational impacts that could result from the addition of the Project traffic to the local circulation system. According to the *County Guidelines*, the study area should include any intersection where the project would add 50 or more peak-hour trips.

The following intersections (including the project driveways) are included as part of the study area:

Intersections

1. Linden Avenue & Valley Boulevard
2. Project Driveway & Valley Boulevard (constructed as part of project)
3. Linden Avenue & North Project Driveway (constructed as part of project)
4. Linden Avenue & South Project Driveway (constructed as part of project)

A copy of the approved project scoping form is contained in **Appendix A**.

2.2 Analysis Scenarios

The following scenarios were evaluated as part of the project:

- Existing Conditions: This scenario reflects the existing street network within the study area in the Year 2022.
- Opening Year 2023 Conditions: This scenario represents the conditions on the anticipated year of opening for the Project, which is assumed to occur in 2023 and includes background growth from other approved projects in the area.
- Opening Year 2023 Plus Project: This scenario represents the conditions on the anticipated year of opening for the Project with the Project traffic.
- Horizon Year 2040 Conditions: This scenario represents the conditions on the Horizon Year.
- Horizon Year 2040 Plus Project: This scenario represents the conditions on the Horizon Year with the Project traffic.

The traditional weekday peak-hour coinciding with the highest volume of traffic between 7:00 and 9:00 AM and between 4:00 and 6:00 PM was evaluated for each analysis scenario.

2.3 Analysis Assumptions

The following list contains the assumptions used for the analyses:

- Peak-hour factor (PHF): Measured in field PHF used for all scenarios
- Base Saturation Flow Rate (pc/hr/ln): 1,800 for exclusive through and right-turn lanes and 1,700 for exclusive left-turn lanes
- Cycle length: Varies between 60 and 120 seconds

2.4 Methodology

2.4.1 Intersection Level of Service Analysis

Signalized and unsignalized intersection operations were analyzed with Synchro II software (Trafficware), using the methodologies outlined in the *Highway Capacity Manual 6th Edition (HCM6)*. The HCM methodology calculates delay, which corresponds to a particular LOS, to describe the overall operation of an intersection. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption and lost travel time.

The LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each minor movement. At a one-way or two-way stop control intersection, the delay reported represents the worst movement, which is typically the left-turns from the minor street approach. The criteria for the LOS grade designations are provided in **Table 2-1**.

The San Bernardino County General Plan states that the County will maintain the minimum acceptable operation at an intersection at LOS D for development proposals located within the Valley or Mountain regions. The LOS requirement is to achieve General Plan consistency.

**Table 2-1
LOS Criteria for Intersections**

| LOS | LOS Criteria (sec/veh) | | Description |
|-----|--------------------------|----------------------------|---|
| | Signalized Intersections | Unsignalized Intersections | |
| A | ≤10 | ≤10 | EXCELLENT. Operations with very low delay and most vehicles do not stop. |
| B | >10 and ≤20 | >10 and ≤15 | VERY GOOD. Operations with good progression but with some restricted movements. |
| C | >20 and ≤35 | >15 and ≤25 | GOOD. Operations where a significant number of vehicles are stopping with some backup and light congestion. |
| D | >35 and ≤55 | >25 and ≤35 | FAIR. Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines. |
| E | >55 and ≤80 | >35 and ≤50 | POOR. Operations where there is significant delay, extensive queuing, and poor progression. |
| F | >80 | >50 | FAILURE. Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection. |

Source: *Highway Capacity Manual 6th Edition*

2.5 Improvement Criteria

Senate Bill 743 (SB 743) was approved in 2013 and changes the way transportation impacts are measured under the California Environmental Quality Act (CEQA). Automobile delay resulting in a level of service (LOS) is no longer considered a significant impact under CEQA. However, this transportation analysis will continue to require the LOS analysis to maintain consistency with policies contained in the County General Plan and require improvements to the circulation system outside of CEQA.

Based on the County General Plan, the LOS goal for intersections and roadway segments is to operate at LOS D or better. As a result, if an intersection or roadway segment degrades from LOS D or better to LOS E or worse with the addition of project traffic, operational improvements would be required.

3 EXISTING CONDITIONS

This section describes the existing roadway network, peak hour traffic volumes, and operations at the study area intersections.

3.1 Roadway Network

Valley Boulevard is an east-west roadway with two lanes of travel provided in each direction with a raised center median. According to the County's Circulation Plan, Valley Boulevard is classified as a Major Highway. Parking is prohibited on both sides of the roadway. The posted speed limit is 40 miles per hour (mph).

Figure 3-1 illustrates the existing geometrics at the study area intersections.

3.2 Alternate Modes of Travel

In addition to the vehicular roadway network, the alternative modes of travel within the study area are described in more detail below.

3.2.1 Bicycle Facilities

There are no existing bicycle facilities in the immediate study area along Valley Boulevard. According to the *San Bernardino County Non-Motorized Transportation Plan, Revised June 2018*, there are no planned improvements to construct a Class II bicycle lane along Valley Boulevard in the immediate vicinity of the project site.

3.2.2 Transit Facilities

OmniTrans provides service to the study area with Route 329. Route 329 provides weekday and Saturday hourly service between Fontana and Bloomington via Cedar Avenue and Valley Boulevard. The nearest transit stop to the Project is located on the north side of Valley Boulevard just west of Linden Avenue.

Appendix B contains a copy of the transit routes.

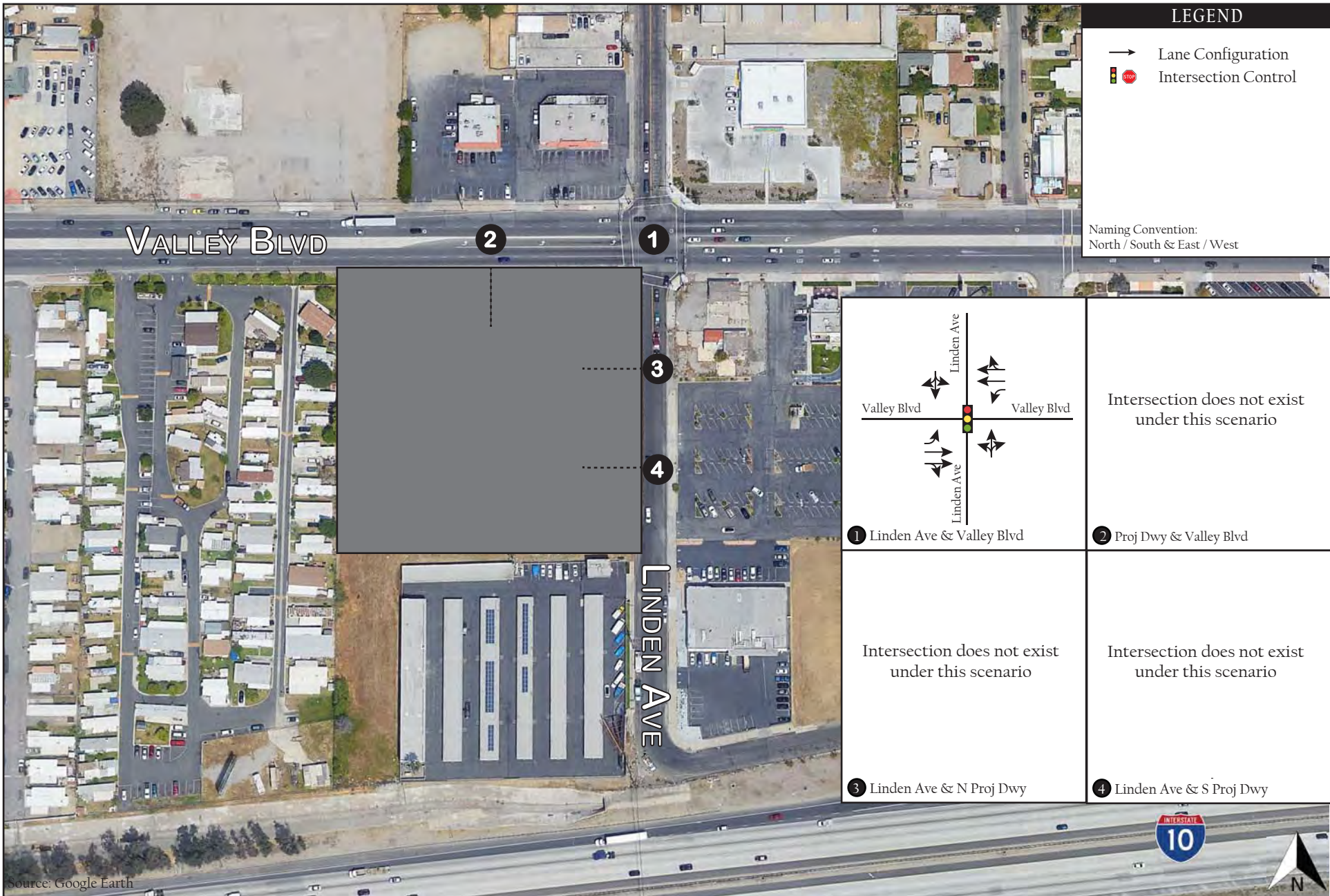
3.2.3 Pedestrian Facilities

There are no sidewalks along the project's frontage of Valley Boulevard or Linden Avenue. As part of the Project, sidewalks will be constructed and tied into the existing sidewalks to the west along Valley Boulevard and to the south along Linden Avenue. Pedestrians can cross Valley Boulevard in the marked crosswalks of the Linden Avenue & Valley Boulevard intersection.

3.3 Traffic Volumes

Traffic volumes at the study area intersections were obtained on Tuesday, February 1, 2022. Figure 3-2 illustrates the study area traffic volumes.

Appendix C contains a copy of the existing traffic volume data sheets.



LEGEND

- Lane Configuration
- 🚦 Intersection Control

Naming Convention:
North / South & East / West

| | |
|---|---|
| <p>1 Linden Ave & Valley Blvd</p> | <p>Intersection does not exist under this scenario</p> <p>2 Proj Dwy & Valley Blvd</p> |
| <p>Intersection does not exist under this scenario</p> <p>3 Linden Ave & N Proj Dwy</p> | <p>Intersection does not exist under this scenario</p> <p>4 Linden Ave & S Proj Dwy</p> |

Source: Google Earth



Saber Hotel and Gas Station

Figure 3-1
Existing Intersection Geometrics



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx,xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy | | | | | | | | | | | | |
|---|-----------------------|-------------------------|-------------------------|-------------|-----------|-----------|----------|----------|-----------|----------|--------|----------|-----------------------------|-----------------------------|-----------------------------|
| <table border="1"> <tr> <td>35 / 28</td> <td>↖ 95 / 137</td> </tr> <tr> <td>14 / 11</td> <td>↑ 427 / 459</td> </tr> <tr> <td>208 / 109</td> <td>↘ 93 / 66</td> </tr> <tr> <td>59 / 208</td> <td>↖ 9 / 28</td> </tr> <tr> <td>403 / 832</td> <td>↑ 4 / 38</td> </tr> <tr> <td>8 / 31</td> <td>↘ 8 / 16</td> </tr> </table> | 35 / 28 | ↖ 95 / 137 | 14 / 11 | ↑ 427 / 459 | 208 / 109 | ↘ 93 / 66 | 59 / 208 | ↖ 9 / 28 | 403 / 832 | ↑ 4 / 38 | 8 / 31 | ↘ 8 / 16 | Intersection does not exist | Intersection does not exist | Intersection does not exist |
| 35 / 28 | ↖ 95 / 137 | | | | | | | | | | | | | | |
| 14 / 11 | ↑ 427 / 459 | | | | | | | | | | | | | | |
| 208 / 109 | ↘ 93 / 66 | | | | | | | | | | | | | | |
| 59 / 208 | ↖ 9 / 28 | | | | | | | | | | | | | | |
| 403 / 832 | ↑ 4 / 38 | | | | | | | | | | | | | | |
| 8 / 31 | ↘ 8 / 16 | | | | | | | | | | | | | | |



Saber Hotel & Gas Station
 Existing Conditions Traffic Volumes

Figure 3-2

3.4 Intersection Analysis

Table 3-2 summarizes the LOS analysis results for the study area intersections under Existing Conditions. As shown in the table, the Linden Avenue & Valley Boulevard intersection operates at LOS B or better during the weekday peak-hours.

Appendix D contains the intersection LOS worksheets.

Table 3-1
Existing Peak Hour Intersection LOS Summary

| # | Intersection | Traffic Control | Peak Hour | Existing Conditions | |
|---|--------------------------|-----------------|-----------|---------------------|------------------|
| | | | | Delay ¹ | LOS ² |
| 1 | Linden Ave & Valley Blvd | Signal | AM | 14.2 | B |
| | | | PM | 14.6 | B |
| 2 | Proj Dwy & Valley Blvd | OWSC | AM | DNE | |
| | | | PM | | |
| 3 | Linden Ave & N Proj Dwy | OWSC | AM | DNE | |
| | | | PM | | |
| 4 | Linden Ave & S Proj Dwy | OWSC | AM | DNE | |
| | | | PM | | |

Notes:

DNE: Does not exist, will be constructed as part of project

OWSC: One-Way Stopped Control, Signal: Traffic Signal

1. Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

2. LOS calculations are based on the methodology outlined in the *Highway Capacity Manual 6th Edition (HCM6)* and performed using Synchro II.

4 PROJECT TRAFFIC

This section describes the estimated trip generation, trip distribution, and assignment of trips to the adjacent roadway network.

4.1 Trip Generation

Trip generation rates for the project were developed utilizing the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*. Trip credits such as passby trips were applied to the proposed use based on standard rates published in the *ITE Trip Generation Handbook, 3rd Edition*. Passby trips are trips that are already on the road network and “passing by” the project site.

The *National Cooperative Highway Research Program (NCHRP) Report 684, Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* was referenced to estimate the internal capture for the project. Internal trip capture rates for the retail, restaurant, and hotel land uses were used for the project. Internal trips would be generated between land uses within the development, but would not be added to the external street network. **Appendix E** contains the internal capture worksheets.

Table 4-1 summarizes the weekday trip generation rates and calculations. As shown in the table, the Project is estimated to generate 2,873 daily trips with 249 AM peak-hour trips and 190 PM peak-hour trips at the project driveways. After applying the passby trip credits, the project is forecasted to generate a net total of 1,356 daily trips with 116 AM peak-hour trips and 83 PM peak-hour trips.

**Table 4-1
Project Trip Generation**

| TRIP GENERATION RATES ¹ | | | | | | | | |
|--|-----------|--------------------|------------|--------------|-------------|------------|--------------|-------------|
| Land Use | ITE Code | Weekday Daily | AM PEAK | | | PM PEAK | | |
| | | | Rate | In:Out Ratio | | Rate | In:Out Ratio | |
| Hotel | 310 | 7.99 trips / rm | 0.46 | 0.56 : 0.44 | | 0.59 | 0.51 : 0.49 | |
| Fast-Food Restaurant w/Drive-Through Window | 934 | 467.48 trips / ksf | 44.61 | 0.51 : 0.49 | | 33.03 | 0.52 : 0.48 | |
| Convenience Store/Gas Station | 945 | 700.43 trips / ksf | 56.52 | 0.50 : 0.50 | | 54.52 | 0.50 : 0.50 | |
| TRIP GENERATION CALCULATIONS | | | | | | | | |
| Land Use | Amount | ADT | AM PEAK | | | PM PEAK | | |
| | | | In | Out | Total | In | Out | Total |
| Proposed Use | | | | | | | | |
| Hotel | 87 rm | 696 | 23 | 18 | 41 | 27 | 25 | 52 |
| <i>Internal Capture Trip Reduction³</i> | | -132 | -1 | -5 | -6 | -6 | -3 | -9 |
| Fast-Food Restaurant w/Drive-Through Window | 2.500 ksf | 1,169 | 58 | 54 | 112 | 44 | 39 | 83 |
| <i>Internal Capture Trip Reduction³</i> | | -224 | -13 | -222 | -11 | -6 | -17 | -15 |
| <i>Passby Reduction (50%)²</i> | | -474 | -24 | -24 | -48 | -15 | -10 | -25 |
| Gas Station w/Convenience Market | 2.400 ksf | 1,682 | 68 | 68 | 136 | 66 | 65 | 131 |
| <i>Internal Capture Trip Reduction³</i> | | -320 | -8 | -9 | -17 | -17 | -16 | -33 |
| <i>Passby Reduction (62%)²</i> | | -1,043 | -43 | -42 | -85 | -41 | -41 | -82 |
| <i>Total Internal Capture Trip Reduction³</i> | | -674 | -20 | -20 | -40 | -38 | -38 | -76 |
| Total Driveway Trips | | 2,873 | 129 | 120 | 249 | 99 | 91 | 190 |
| <i>Total Passby Reduction</i> | | <i>-1,517</i> | <i>-67</i> | <i>-66</i> | <i>-133</i> | <i>-56</i> | <i>-51</i> | <i>-107</i> |
| Net New Traffic | | 1,356 | 62 | 54 | 116 | 43 | 40 | 83 |

Notes:

- The trip rates for the project's land use are based on the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*.
- The passby trip rates are based on the average data published in the *ITE Trip Generation Handbook, 3rd Edition*.
- The internal capture trips are estimated based on the methodologies contained in the NCHRP Report 684. The daily percentage of 19% was based on the average of the AM and PM peak period internal capture percentages.

4.2 Trip Distribution and Assignment

The Project trip distribution was estimated based on existing travel patterns and/or on logical routes to regional facilities. The following list summarizes the proposed trip distribution:

- 25 percent to/from the north along Linden Avenue
- 5 percent to/from the south along Linden Avenue
- 35 percent to/from the east along Valley Boulevard
- 35 percent to/from the west along Valley Boulevard

Figure 4-1 displays the assumed Project trip distribution through the study intersections and project driveways. At the project driveways, all entering traffic from the east would be distributed to the driveway off Linden Avenue and all entering traffic from the west would be distributed to the driveway off of Valley Boulevard. For exiting traffic, it was assumed that all traffic heading west would exit onto Linden Avenue and make a left-turn onto Valley Boulevard.

Based on the Project trip generation and distribution, the Project trips were assigned to the study area. Figure 4-2 illustrates the net Project trip assignment and Figure 4-3 illustrates the passby trip assignment. Figure 4-4 illustrates the total Project trip assignment, which is the sum of Figures 4-2 and 4-3. It should be noted that several movements show a negative value, which correlates to a reduction in the through volumes due to passby traffic.



xx% / (yy%) = Enter % / (Exit %)
 The naming convention for intersections is North / South & East / West
 Trip Distribution Percentage

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|-------------------------|-----------------------|-------------------------|-------------------------|
| | | | |

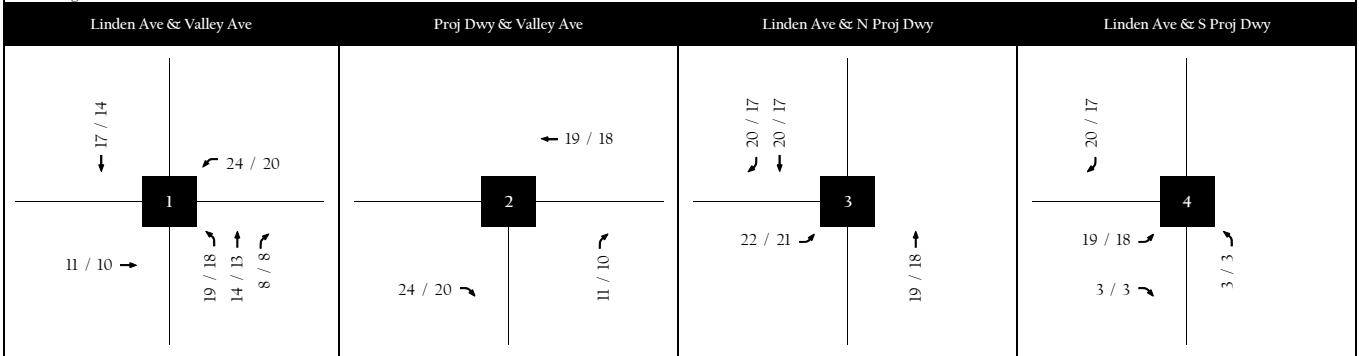


Saber Hotel & Gas Station
 Project Trip Distribution

Figure 4-1



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West



Saber Hotel & Gas Station
 Net Project Trip Assignment

Figure 4-2



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|-------------------------|-----------------------|-------------------------|-------------------------|
| | | | |



Saber Hotel & Gas Station
 Passby Project Trip Assignment

Figure 4-3



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx.xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|---|---|---|---|
| <p>17 / 14 ↕</p> <p>↔ 28 / -29 ↘ 52 / 49</p> <p>1</p> <p>11 / 10 →</p> <p>↘ 46 / 44 ↕ 14 / 13 ↙ 8 / 8</p> | <p>↔ 19 / 18</p> <p>2</p> <p>↔ -28 / -29 ↘ 52 / 49</p> <p>↘ 38 / 36</p> | <p>48 / 45 ↘ 28 / 25 ↕</p> <p>3</p> <p>↘ 50 / 50</p> <p>↕ 40 / 38</p> | <p>40 / 38 ↘ -8 / -8 ↕</p> <p>4</p> <p>↘ 40 / 38 ↙ 3 / 3</p> <p>↘ 7 / 7 ↕ -4 / -4</p> |



Saber Hotel & Gas Station
 Total Project Trip Assignment

Figure 4-4

5 OPENING YEAR 2023

This section summarizes the operations at the study area intersection and project driveways with the addition of the Project traffic in the anticipated year of opening in 2023.

5.1 Roadway Network

No changes to the existing roadway network are proposed under this condition except at the project driveways along Valley Boulevard and Linden Avenue.

Figure 5-1 illustrates the intersection geometrics with the addition of the Project traffic.

5.2 Cumulative Projects

Eleven cumulative projects were identified from a list of projects that the City's planning department provided that could contribute traffic to the study area network. These approved projects are located within a 2-mile radius from the project site. It should be noted that majority of these projects are located outside of the immediate study area and would only contribute a small percentage of traffic to the study area intersection and roadway segment. The following list summarizes the cumulative projects along with the City's project number and location:

- 1) *PROJ-2020-00036/17906 Valley Blvd* – 98-unit multi-family development
- 2) *PROJ-2020-00209/10380 Alder Ave* – 174,780 sf warehousing development
- 3) ***PRAA-2020-00001/18762 Valley Blvd*** – 500 sf car wash development
- 4) *PROJ-2020-00138/18653 Slover Ave* – 5,812 sf convenience store with gas station development
- 5) *PROJ-2020-00035/10746 Cedar Ave* – 321 space truck storage yard development
- 6) *PROJ-2020-00003/SW Corner of Cedar Ave & Santa Ana Ave* – 5,200 sf convenience store with gas station and a 1,477 sf car wash development
- 7) *PROJ-2019-00079/SE Corner of Cedar Ave & Santa Ana Ave* – 9,900 sf convenience store with gas station and a 5,800 sf fast-food restaurant with drive-through window development
- 8) *PROJ-2020-00041/NE Corner of Cedar Ave & Jurupa Ave* – 5,000 sf convenience store with gas station, 2,634 sf car wash, 2,550 sf fast-food restaurant with drive-through window, and 2,244 sf storage development
- 9) *PROJ-2020-00122/11362 Cedar Ave* – 1,625 sf fast-food restaurant with drive-through window development
- 10) *PRAA-2020-00014/11342 Spruce Ave* – 2,540 sf church expansion
- 11) *PROJ-2020-00148/SE Corner of Cactus Ave & Jurupa Ave* – 9.95-acre truck terminal development.

It should be noted that only two cumulative projects would contribute traffic to the study area. These projects are shown in **bold** in the list above.

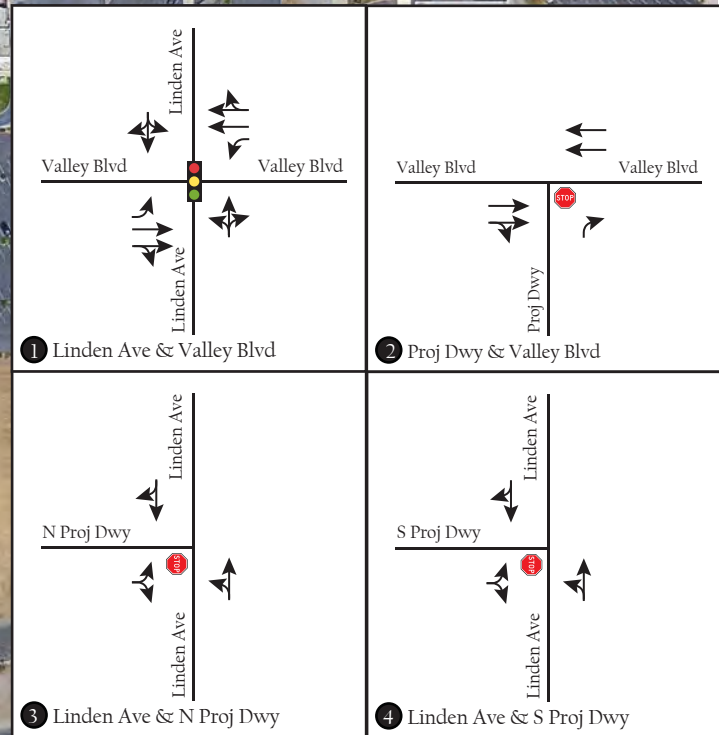
Table 5-1 summarizes the trip generation of each cumulative project.



LEGEND

- Lane Configuration
- 🚦 Intersection Control

Naming Convention:
North / South & East / West



Source: Google Earth



Saber Hotel and Gas Station

Figure 5-1
Opening Year 2023 Intersection Geometrics

**Table 5-1
Cumulative Trip Generation Summary**

| TRIP GENERATION CALCULATIONS¹ | | | | | | | | | | |
|---|--|---|-------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Project Number/Location ² | Land Use | Amount | ADT | AM PEAK | | | PM PEAK | | | |
| | | | | In | Out | Total | In | Out | Total | |
| 1 | PROJ-2020-00036/17906 Valley Blvd | Multifamily Housing (Low-Rise) | 98 du | 661 | 10 | 30 | 40 | 32 | 18 | 50 |
| 2 | PROJ-2020-00209/10380 Alder Ave | Warehousing | 174.780 ksf | 299 | 24 | 6 | 30 | 9 | 23 | 32 |
| 3 | PRAA-2020-00001/18762 Valley Blvd | Automated Car Wash | 0.500 ksf | 388 | 0 | 0 | 0 | 25 | 14 | 39 |
| 4 | PROJ-2020-00138/18653 Slover Ave | Gas Station w/Convenience Store | 5.812 ksf | 4,869 | 242 | 242 | 484 | 202 | 201 | 403 |
| 5 | PROJ-2020-00035/10746 Cedar Ave | Truck Storage Yard | 321 sp | 58 | 3 | 1 | 4 | 3 | 3 | 6 |
| 6 | PROJ-2020-00003/SW Corner of Cedar Ave & Santa Ana Ave | Convenience Store w/Gas Station | 5.200 ksf | 4,356 | 217 | 216 | 433 | 181 | 180 | 361 |
| | | Car Wash | 1.477 ksf | 1,145 | 0 | 0 | 0 | 58 | 57 | 115 |
| 7 | PROJ-2019-00079/SE Corner of Cedar Ave & Santa Ana Ave | Convenience Store w/Gas Station | 9.900 ksf | 8,293 | 412 | 412 | 824 | 343 | 343 | 686 |
| | | Fast-Food Restaurant w/Drive-Through Window | 5.800 ksf | 2,712 | 133 | 126 | 259 | 100 | 92 | 192 |
| 8 | PROJ-2020-00041/NE Corner of Cedar Ave & Jurupa Ave | Convenience Store w/Gas Station | 5.000 ksf | 4,188 | 208 | 208 | 416 | 174 | 173 | 347 |
| | | Car Wash | 2.634 ksf | 2,042 | 0 | 0 | 0 | 103 | 102 | 205 |
| | | Fast-Food Restaurant w/Drive-Through Window | 2.550 ksf | 1,193 | 59 | 55 | 114 | 45 | 40 | 85 |
| | | Storage | 2.244 ksf | 4 | 1 | 0 | 1 | 1 | 0 | 1 |
| 9 | PROJ-2020-00122/11362 Cedar Ave | Fast-Food Restaurant w/o Drive-Through Window | 1.625 ksf | 733 | 42 | 29 | 71 | 27 | 27 | 54 |
| 10 | PRAA-2020-00014/11342 Spruce Ave | Church | 2.540 ksf | 20 | 1 | 0 | 1 | 1 | 1 | 2 |
| 11 | PROJ-2020-00148/SE Corner of Cactus Ave & Jurupa Ave | Truck Terminal | 9.95 ac | 815 | 30 | 43 | 73 | 29 | 37 | 66 |
| CUMULATIVE TOTAL | | | | 31,776 | 1,382 | 1,368 | 2,750 | 1,333 | 1,311 | 2,644 |

Notes:

du: dwelling unit, ksf: 1,000 square feet, sp: spaces, st: students, ac: acre

1. The trip rates for each respective project's land use are based on the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*.
2. The cumulative projects were provided by the County and only include approved projects.

As shown in the table, the total trip generation for the cumulative projects results in approximately 31,776 daily trips with 2,750 AM peak-hour trips and 2,644 PM peak-hour trips. However, approximately three percent of the total cumulative project traffic volumes were assigned to the study area.

Figure 5-2 illustrates the traffic volumes of the cumulative projects in the study area. Appendix F contains additional details on the cumulative projects.

5.3 Traffic Volumes

The Opening Year 2023 traffic volumes were developed by adding the cumulative traffic volumes to the existing traffic volumes and includes one year of growth assuming an annual growth rate of two percent. Figure 5-3 illustrates the Opening Year 2023 baseline traffic volumes.

The Opening Year 2023 With Project traffic volumes were developed by adding the project trips to the Opening Year 2023 Baseline traffic volumes. Figure 5-4 illustrates the Opening Year 2023 with Project traffic volumes.

5.4 Intersection Analysis

Table 5-2 displays the LOS analysis results for the study intersection under Opening Year 2023 conditions. As shown in the table, all intersections and project driveways would continue to operate at LOS B or better during the weekday peak-hours. As a result, no additional intersection improvements are required and/or recommended.

Appendix D contains the intersection LOS worksheets.

Table 5-2
Opening Year 2023 Peak Hour Intersection LOS Summary

| # | Intersection | Traffic Control | Peak Hour | Opening Year 2023 | | Opening Year 2023 w/Proj | | Δ in Delay | Improvement? |
|---|--------------------------|-----------------|-----------|--------------------|------------------|--------------------------|------------------|------------|--------------|
| | | | | Delay ¹ | LOS ² | Delay ¹ | LOS ² | | |
| 1 | Linden Ave & Valley Blvd | Signal | AM | 14.4 | B | 15.4 | B | 1.0 | No |
| | | | PM | 15.1 | B | 16.8 | B | 1.7 | No |
| 2 | Proj Dwy & Valley Blvd | OWSC | AM | DNE | | 10.3 | B | 10.3 | No |
| | | | PM | DNE | | 14.1 | B | 14.1 | No |
| 3 | Linden Ave & N Proj Dwy | OWSC | AM | DNE | | 10.3 | B | 10.3 | No |
| | | | PM | DNE | | 10.8 | B | 10.8 | No |
| 4 | Linden Ave & S Proj Dwy | OWSC | AM | DNE | | 9.7 | A | 9.7 | No |
| | | | PM | DNE | | 10.1 | B | 10.1 | No |

Notes:

DNE: Does not exist, will be constructed as part of project

OWSC: One-Way Stopped Control, Signal: Traffic Signal

1. Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

2. LOS calculations are based on the methodology outlined in the *Highway Capacity Manual 6th Edition (HCM6)* and performed using Synchro II.



Note:
 Cumulative projects #2 and #4 to #11 are outside of the study area and will not contribute traffic to the study area intersections.

xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx.xxxx ADT Location of Cumulative Projects

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|-------------------------|-----------------------|-------------------------|-------------------------|
| | | | |



Saber Hotel & Gas Station
 Cumulative Traffic Volumes

Figure 5-2



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx,xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy | | | | | | | | | | | | | | |
|--|-----------------------|-------------------------|-------------------------|-------------|---------|-----------|-----------|--|-----------|--|---------|--|----------|--|-----------------------------|-----------------------------|-----------------------------|
| <table border="1"> <tr> <td>29 / 111</td> <td>↘ 97 / 140</td> </tr> <tr> <td>36 / 212</td> <td>↖ 441 / 497</td> </tr> <tr> <td>11 / 41</td> <td>↔ 95 / 67</td> </tr> <tr> <td>111 / 212</td> <td></td> </tr> <tr> <td>212 / 111</td> <td></td> </tr> <tr> <td>41 / 36</td> <td></td> </tr> <tr> <td>111 / 29</td> <td></td> </tr> </table> | 29 / 111 | ↘ 97 / 140 | 36 / 212 | ↖ 441 / 497 | 11 / 41 | ↔ 95 / 67 | 111 / 212 | | 212 / 111 | | 41 / 36 | | 111 / 29 | | Intersection does not exist | Intersection does not exist | Intersection does not exist |
| 29 / 111 | ↘ 97 / 140 | | | | | | | | | | | | | | | | |
| 36 / 212 | ↖ 441 / 497 | | | | | | | | | | | | | | | | |
| 11 / 41 | ↔ 95 / 67 | | | | | | | | | | | | | | | | |
| 111 / 212 | | | | | | | | | | | | | | | | | |
| 212 / 111 | | | | | | | | | | | | | | | | | |
| 41 / 36 | | | | | | | | | | | | | | | | | |
| 111 / 29 | | | | | | | | | | | | | | | | | |



Saber Hotel & Gas Station
 Opening Year 2023 Baseline Traffic Volumes

Figure 5-3



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx,xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|--|---|---|--|
| <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>36 / 29 ↖ ↗</p> <p>31 / 25 ← →</p> <p>212 / 111 ↘ ↙</p> </div> <div style="text-align: center;"> <p>97 / 140 ↖ ↗</p> <p>413 / 468 ← →</p> <p>147 / 116 ↘ ↙</p> </div> </div> <p style="text-align: center;">1</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>60 / 212 ↖ ↗</p> <p>437 / 875 ← →</p> <p>8 / 32 ↘ ↙</p> </div> <div style="text-align: center;"> <p>55 / 83 ↖ ↗</p> <p>18 / 52 ← →</p> <p>16 / 24 ↘ ↙</p> </div> </div> | <div style="text-align: center;"> <p>504 / 583 ← →</p> </div> <p style="text-align: center;">2</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>466 / 1079 ← →</p> <p>52 / 49 ↖ ↗</p> </div> <div style="text-align: center;"> <p>38 / 36 ↖ ↗</p> </div> </div> | <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>48 / 45 ↖ ↗</p> <p>145 / 135 ← →</p> </div> <div style="text-align: center;"> <p>50 / 50 ↖ ↗</p> </div> </div> <p style="text-align: center;">3</p> <div style="text-align: center;"> <p>61 / 132 ← →</p> </div> | <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>40 / 38 ↖ ↗</p> <p>109 / 102 ← →</p> </div> <div style="text-align: center;"> <p>40 / 38 ↖ ↗</p> <p>3 / 3 ↖ ↗</p> </div> </div> <p style="text-align: center;">4</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>7 / 7 ↖ ↗</p> <p>17 / 90 ← →</p> </div> </div> |



Saber Hotel & Gas Station
 Opening Year 2023 With Project Traffic Volumes

Figure 5-4

6 HORIZON YEAR 2040

This section summarizes the operations at the study area intersection and project driveways with the addition of the Project traffic in the Horizon Year 2040 scenario.

6.1 Roadway Network

No changes to the existing roadway network are proposed under this scenario. As a result, the Figures 3-1 and 5-1 illustrate the intersection geometrics of the without and with project scenarios, respectively.

6.2 Traffic Volumes

The Horizon Year traffic volumes were developed to account for future traffic growth in the study area. An ambient growth factor of two percent per year was applied to the existing traffic volumes. This ambient growth factor is consistent with other projects approved by the San Bernardino County, Department of Public Works, Traffic Division.

Figure 6-1 illustrates the Horizon Year 2040 baseline traffic volumes. Figure 6-2 illustrates the Horizon Year 2040 with Project traffic volumes.



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx,xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy | | | | | | | | | | | | |
|---|-----------------------|-------------------------|-------------------------|-------------|-----------|------------|----------|-----------|------------|----------|---------|-----------|-----------------------------|-----------------------------|-----------------------------|
| <table border="1"> <tr> <td>48 / 38</td> <td>↘ 129 / 186</td> </tr> <tr> <td>19 / 15</td> <td>↑ 581 / 624</td> </tr> <tr> <td>283 / 148</td> <td>↙ 126 / 90</td> </tr> <tr> <td>80 / 283</td> <td>↘ 12 / 52</td> </tr> <tr> <td>548 / 1132</td> <td>↑ 5 / 52</td> </tr> <tr> <td>11 / 42</td> <td>↙ 11 / 22</td> </tr> </table> | 48 / 38 | ↘ 129 / 186 | 19 / 15 | ↑ 581 / 624 | 283 / 148 | ↙ 126 / 90 | 80 / 283 | ↘ 12 / 52 | 548 / 1132 | ↑ 5 / 52 | 11 / 42 | ↙ 11 / 22 | Intersection does not exist | Intersection does not exist | Intersection does not exist |
| 48 / 38 | ↘ 129 / 186 | | | | | | | | | | | | | | |
| 19 / 15 | ↑ 581 / 624 | | | | | | | | | | | | | | |
| 283 / 148 | ↙ 126 / 90 | | | | | | | | | | | | | | |
| 80 / 283 | ↘ 12 / 52 | | | | | | | | | | | | | | |
| 548 / 1132 | ↑ 5 / 52 | | | | | | | | | | | | | | |
| 11 / 42 | ↙ 11 / 22 | | | | | | | | | | | | | | |



Saber Hotel & Gas Station
 Horizon Year 2040 Traffic Volumes

Figure 6-1



xx / yy = AM / PM Peak-Hour Turning Movement Volumes
 The naming convention for intersections is North / South & East / West

xx,xxx ADT

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|--|--|--|--|
| <p>48 / 38 36 / 29 283 / 148</p> <p>129 / 186 553 / 595 178 / 139</p> <p>1</p> <p>80 / 283 559 / 1142 11 / 42</p> <p>58 / 96 19 / 65 19 / 30</p> | <p>660 / 732</p> <p>2</p> <p>611 / 1428 52 / 49</p> <p>38 / 36</p> | <p>48 / 45 184 / 172</p> <p>3</p> <p>50 / 50</p> <p>69 / 163</p> | <p>40 / 38 148 / 139</p> <p>4</p> <p>40 / 38 3 / 3</p> <p>7 / 7 25 / 121</p> |



Saber Hotel & Gas Station
 Horizon Year 2040 With Project Traffic Volumes

Figure 6-2

6.3 Intersection Analysis

Table 6-1 displays the LOS analysis results for the study intersection under Horizon Year 2040 conditions. As shown in the table, all intersections and project driveways would continue to operate at LOS C or better during the weekday peak-hours. As a result, no additional intersection improvements are required and/or recommended.

Appendix D contains the intersection LOS worksheets.

**Table 6-1
Horizon Year 2040 Peak Hour Intersection LOS Summary**

| # | Intersection | Traffic Control | Peak Hour | Horizon Year 2040 | | Horizon Year 2040 w/Proj | | Δ in Delay | Improvement? |
|---|--------------------------|-----------------|-----------|--------------------|------------------|--------------------------|------------------|------------|--------------|
| | | | | Delay ¹ | LOS ² | Delay ¹ | LOS ² | | |
| 1 | Linden Ave & Valley Blvd | Signal | AM | 19.0 | B | 21.0 | C | 2.0 | No |
| | | | PM | 28.0 | C | 34.7 | C | 6.7 | No |
| 2 | Proj Dwy & Valley Blvd | OWSC | AM | DNE | | 11.1 | B | 11.1 | No |
| | | | PM | | | 17.5 | C | 17.5 | No |
| 3 | Linden Ave & N Proj Dwy | OWSC | AM | DNE | | 10.7 | B | 10.7 | No |
| | | | PM | | | 11.4 | B | 11.4 | No |
| 4 | Linden Ave & S Proj Dwy | OWSC | AM | DNE | | 10.0 | A | 10.0 | No |
| | | | PM | | | 10.7 | B | 10.7 | No |

Notes:

DNE: Does not exist, will be constructed as part of project

OWSC: One-Way Stopped Control, Signal: Traffic Signal

1. Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

2. LOS calculations are based on the methodology outlined in the *Highway Capacity Manual 6th Edition (HCM6)* and performed using Synchro II.

7 VMT ANALYSIS

Senate Bill 743 (SB 743) was approved in 2013 and changes the way transportation impacts are measured under the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles travelled (VMT) as the required metric to replace the automobile delay-based LOS. The VMT assessment is required to satisfy CEQA guidelines that utilizes VMT as the required metric to determine transportation impacts. The VMT assessment was based on the criteria outlined in the *County Guidelines*.

7.1 VMT Assessment

According to the *County Guidelines*, there are several screening criteria that can be applied to effectively screen projects from VMT project-level assessments. The purpose is to screen out projects that are presumed to have a non-significant transportation impact based on facts of a project and to avoid unnecessary analysis and findings that would be inconsistent with the intent of SB 743. The following lists the screening criteria:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening

If the project meets any of the screening criteria above, they are presumed to not have a significant impact and are screened out from completing additional VMT analysis.

7.1.1 TPA Screening

As described in the *County Guidelines*, projects located within a TPA (i.e., within 0.5 miles of an existing major transit stop or an existing stop along a high-quality transit corridor) may be presumed to have a less than significant impact absent substantial evidence to the contrary.

The San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool was used for this screening. The Project site is not located within 0.5 miles of an existing major transit stop or along a high-quality transit corridor.

As a result, the TPA screening threshold is not met.

7.1.2 Low VMT Area Screening

As described in the *County Guidelines*, residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. A low VMT area is defined as an individual traffic analysis zone (TAZ) where the total daily VMT per person/employee is greater than four percent below the existing VMT per person/employee baseline level for the unincorporated County.

The SBCTA VMT Screening Tool was used for this screening. The project is located in TAZ 53744601. The County's VMT per service population is 34.6. The Project's TAZ VMT per service population is 22.2, which is 35.78 percent lower than the baseline.

As a result, the Low VMT Area screening threshold is met.

7.1.3 Project Type Screening

As described in the *County Guidelines*, hotel projects generating less than 110 daily vehicle trips may be presumed to have a less than significant impact as their uses are often local serving in nature. For a hotel project, the threshold is less than 12 hotel rooms. The Project contains 87 hotel rooms, which exceeds the threshold.

As a result, the Project Type screening threshold is not met.

Based on the review of the applicable VMT screening thresholds, the Project satisfies the Low VMT Area screening and is presumed to result in a less than a significant VMT impact. As such, no additional VMT analysis is required or recommended.

Appendix G contains additional information on the Project's VMT.

8 SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following list summarizes the key findings for the Project:

- The Project consists of a 5-story, 87-room hotel, a gas station with a 2,400 square-foot sf convenience store, and a 2,500 sf fast-food with drive-through lane.
- The Project is forecasted to generate a net total of 1,356 daily trips with 116 AM peak-hour trips and 83 PM peak-hour trips.
- All intersections and project driveways in the study area are expected to operate at an acceptable LOS C or better under all scenarios.
- The Project satisfies the Low VMT Area screening and is presumed to result in a less than a significant VMT impact.

This traffic study has been prepared in accordance with the *Congestion Management Program for San Bernardino County* and *San Bernardino County Transportation Impact Study Guidelines, July 9, 2019*. The proposed Project will not result in any deficient facilities in the study area and no improvements are required or recommended of the proposed Project.

Appendix A

Project Scoping Form



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009) |
|----------------------|--|

This Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:
 Available on the Department of Public Works Website:
<http://cms.sbcounty.gov/dpw/Transportation/Traffic.aspx>

| | | | |
|--|---|--|------|
| Project Address/APN | 18497 Valley Blvd (APN 0252-161-43,45) | | |
| Project Description | Construct a 5-story hotel including 87 rooms, 2,500 sf fast food restaurant with drive-thru, and a 2,400 sf convenience store with a gas station on a vacant lot. See Figure 1-2 for proposed site plan. | | |
| City | Bloomington | | |
| Project Horizon Year | 2040 | Project Opening Year | 2023 |
| Closest Intersection (Xtn) to the Project | | | |
| Xtn N/S Street Name | Linden Ave | | |
| Xtn E/W Street Name | Valley Blvd | | |
| County Supervisorial District | | Ambient Growth Rate per Year Valley 2%, Desert 1% | 2% |

| | Traffic Engineer | Owner/Developer |
|------------------------------|------------------------------------|-------------------------|
| Company | Mizuta Traffic Consulting | Arrow Plaza, LLC |
| Name | Marc Mizuta | Saber Awad |
| Address | 5694 Mission Center Rd #602-121 | 18497 Valley Blvd |
| City, State, Zip Code | San Diego, CA 92108 | Bloomington, CA 92316 |
| Phone # | 858-752-8212 | 909-519-3346 |
| Email address | mizutattrafficconsulting@gmail.com | Saberawad3346@gmail.com |

Prepared By:

Print Name: Marc Mizuta 05/23/22

Owner/Engineer Date



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009) |
|----------------------|--|

1. Traffic Distribution: Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.

See attached Figure 4-1 for the project trip distribution.

2. Trip Credit: Exact amount of credit subject to approval by Traffic Division.

| | | |
|---|--------|--------------------------|
| Transportation Demand Management (TDM) | Yes/no | |
| Existing Active Land Use | Yes/no | |
| Previous Land Use | Yes/no | |
| Internal Trip Reduction | Yes/no | 674 ADT, 40 AM, 76 PM |
| Pass-by Trip Reduction | Yes/no | 1517 ADT, 133 AM, 107 PM |

3. Related Projects: Consultant should check with Planning in the San Bernardino County Department of [Land Use Services](#) and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

4. Freeway Analysis: The potential traffic impact on the following Freeway(s) must be considered.

n/a

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Vehicle Miles Traveled-Focused Transportation Impact Study Guide (May 2020) and can be obtained from <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf>. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the San Bernardino County Transportation Authority CMP outlines allowable modifications to these procedures. The San Bernardino County Transportation Authority CMP can be viewed online at: <https://www.gosbcta.com/planning-sustainability/?term=249>



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009) |
|----------------------|--|

5. Trip Generation – See attached Table 1 for additional details on the trip generation

| Trip Generation Rate(s) Source: ITE Trip Generation | | I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other: | | | | | | | Edition: | | 11th | | | |
|---|---|---|----------|-------------|-------------|-------------------|-----|-------|-------------------|-----|-------|-------------------|-----|-------|
| Land Use Code | Land Use | Rate Based on | QTY | AVTE Units* | Daily Trips | Weekday A.M. Peak | | | Weekday P.M. Peak | | | Weekend peak hour | | |
| | | | | | | In | Out | Total | In | Out | Total | In | Out | Total |
| 310 | Hotel | I | 87 rooms | | 696 | 23 | 18 | 41 | 27 | 25 | 52 | -- | -- | -- |
| 934 | Fast-Food Restaurant w/Drive-Through Window | I | 2,500 sf | | 1169 | 58 | 54 | 112 | 44 | 39 | 83 | -- | -- | -- |
| 945 | Convenience Store/Gas Station | I | 2,400 sf | | 1682 | 68 | 68 | 136 | 66 | 65 | 131 | -- | -- | -- |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

* - Average Vehicle Trip Ends.
 For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store. Units include ksf, employee, GLA, etc.



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009) |
|----------------------|--|

6. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

| Xtn # | % County | % City | N-S/E-W Street Name | City Name/Caltrans | Signalized | CMP |
|-------|----------|--------|------------------------|--------------------|------------|--------|
| 1 | 100% | 0% | Linden Ave/Valley Blvd | SB County | Yes/no | Yes/no |
| 2 | | | | | Yes/no | Yes/no |
| 3 | | | | | Yes/no | Yes/no |
| 4 | | | | | Yes/no | Yes/no |
| 5 | | | | | Yes/no | Yes/no |
| 6 | | | | | Yes/no | Yes/no |
| 7 | | | | | Yes/no | Yes/no |
| 8 | | | | | Yes/no | Yes/no |
| 9 | | | | | Yes/no | Yes/no |
| 10 | | | | | Yes/no | Yes/no |

Cities/agencies to be consulted:

See attached Figure 1-1 Vicinity Map



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009) |
|----------------------|--|

7. Other:

| |
|--|
| Traffic counts may be conducted immediately per the following: |
| <ul style="list-style-type: none"> • Must be taken on Tuesdays, Wednesdays or Thursdays. • Certain projects may need to collect traffic counts on Friday or Sunday |
| <ul style="list-style-type: none"> • Must exclude holidays, and the first weekdays before and after the holiday. |
| <ul style="list-style-type: none"> • Must be taken on days when local schools or colleges are in session. |
| <ul style="list-style-type: none"> • Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents). |
| <ul style="list-style-type: none"> • Traffic counts used for other traffic studies in the area shall NOT be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%. |
| <ul style="list-style-type: none"> • New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified. |
| <ul style="list-style-type: none"> • For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way. |
| <ul style="list-style-type: none"> • For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted. |
| <ul style="list-style-type: none"> • Raw traffic counts data must be included with traffic analysis study |
| <ul style="list-style-type: none"> • Traffic Counts must not be older than 1 year prior to submittal unless approved by County Traffic. |
| <ul style="list-style-type: none"> • Based on discussions with County staff, the opening year scenario will include projects in the immediate area that will be provided by the Planning Dept. The Horizon Year 2040 traffic volumes will be estimated by applying the annual growth rate of 2%. |
| |

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of \$1,802 is required at the time that a land use application is filed with the Department of Land Use Services. If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.



SCOPE FOR TRAFFIC STUDY

| | |
|----------------------|--|
| Project Name: | Saber Hotel & Gas Station (TRSTY-2022-00009, APN 0252-161-43,45) |
|----------------------|--|

9. Contact Information:

Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:

County of San Bernardino
Dept. of Public Works, Traffic Division
825 E. 3rd Street, Rm 115
San Bernardino, CA 92415-0835

Phone: 909-387-8186

Fax: 909-387-7809

Email: Osvaldo.Roque@dpw.sbcounty.gov or Shawn.Johnson@dpw.sbcounty.gov

Proposed Hotel and Gas Station For:
Arrow Plaza LLC
 18497 Valley Blvd, Bloomington, CA 92316



OWNER: ARROW PLAZA LLC
 CONTACT: SABER AWAD
 saberaawad314@gmail.com
 (909) 919-3346

PROJECT ADDRESS: 18497 VALLEY BLVD,
 BLOOMINGTON, CA 92316

ARCHITECT: ANDRESEN ARCHITECTURE INC.
 17087 ORANGE WAY
 FONTANA, CA 92335
 CONTACT: DOUG ANDRESEN
 doug.andresen@aarfirm.com

CIVIL: HP ENGINEERING, INC.
 1465 CRESTVIEW ROAD
 REDLANDS, CA 92374
 HENRY FRODOLZ
 (909) 336-8239
 hpf@hpeng.com

LANDSCAPING: RICHARD POPE AND ASSOCIATES
 158 SOUTH 9TH STREET, SUITE 103
 SAN BERNARDINO, CA 92408
 RICHARD POPE
 (909) 888-6568
 rpa.rpa@wpcon.net

APN: 0520-161-43-45

ZONING: VALLEY CORRIDOR COMMERCIAL DISTRICT (VCCOM)

OCCUPANCY: HOTEL, A.C. 1-1
 RESTAURANT, A-2

CONSTRUCTION: 17800 SQ. FT. (178,000 SQ. FT.)

FIRE SPINNEERS: REQUIRED

PROJECT DESCRIPTION: CONSTRUCT 5-STORY HOTEL INCLUDING 80 ROOMS AND 7 SUITES, FAST FOOD RESTAURANT WITH DRIVE-THRU, CANTINE AND GAS STATION ON VACANT LOT

TOTAL LOT AREA: 116,742.26 SQ. FT. (2.68 AC)

NET LOT AREA (AFTER DEDICATION): 116,742.26 SQ. FT. (2.68 AC)

HOTEL FOOTPRINT AREA: 11,877 SQ. FT.

CANTINE FOOTPRINT AREA: 2,300 SQ. FT.

RESTAURANT FOOTPRINT AREA: 14,777 SQ. FT.

TOTAL FOOTPRINT AREA: 28,954 SQ. FT.

LOT COVERAGE: 24.8%

LOT AREA RATIO: 24.8%

NET LOT AREA: 98,985.95 SQ. FT. (2.26 AC)

LANDSCAPE AREA: 10,333.52 SQ. FT. (23.74 AC)

HARDSCAPE AREA: 82,643.21 SQ. FT. (1.89 AC)

BUILDING HEIGHT: 60 FEET / 5 STORES MAXIMUM

BUILDING AREA: 52,783 SQ. FT. (87 GUEST ROOMS)

HOTEL GROSS FLOOR AREA: 11,877 SQ. FT. (18 ROOMS)

FIRST FLOOR: 10,516 SQ. FT. (20 ROOMS)

SECOND FLOOR: 10,516 SQ. FT. (20 ROOMS)

FOURTH FLOOR: 10,516 SQ. FT. (20 ROOMS)

FIFTH FLOOR: 9,235 SQ. FT. (7 SUITES)

HOTEL AREA: 52,783 SQ. FT.

RESTAURANT AREA: 14,777 SQ. FT.

CANTINE AREA: 2,300 SQ. FT.

TOTAL QUESTIONED AREA: 69,860 SQ. FT.

FUEL PUMP CANOPY AREA: 3,192 SQ. FT.

HOTEL DRIVE-THRU CANOPY AREA: 3,271 SQ. FT.

GAS PUMP AREA: 380 SQ. FT.

TOTAL CANOPY AREA: 6,843 SQ. FT.

STALLS PROVIDED: 87 STALLS

DRIVE-THRU (BY ROOMS): 1 STALL

TOTAL HOTEL PARKING: 88 STALLS

RESTAURANT: 20 STALLS

CANTINE (2,300 SQ. FT.): 10 STALLS

TOTAL REQUIRED: 118 STALLS

TOTAL PARKING PROVIDED: 137 STALLS

W/ HANDBICAP ACCESSIBLE SPACES: 3

CLEAN AIR / VAMPPOOL / EV SPACES: 6

EXISTING LAND USE ZONING FOR 80-AC VACANT PROPERTY:

- NORTH OF PROPERTY: ZONING: VCCOM DESCRIPTION: RETAIL STORE, CLASS: COMMERCIAL, (ACROSS VALLEY BLVD.)
- WEST OF PROPERTY: ZONING: VCCOM DESCRIPTION: VACANT LAND, CLASS: COMMERCIAL
- EAST OF PROPERTY: ZONING: VCCOM DESCRIPTION: VACANT LAND, CLASS: COMMERCIAL
- SOUTH OF PROPERTY: ZONING: VCCOM DESCRIPTION: MINI STORAGE WAREHOUSE, CLASS: COMMERCIAL

Sequence of Drawings - DR

| Number | Description |
|--------|-----------------------------|
| PL1 | Site Plan |
| PL2 | Proposed P&L & C-Store |
| PL3 | Proposed Gas Station Canopy |
| PL4 | Proposed Hotel Plans |
| PL5 | Proposed Hotel Elevations |
| G-1 | Primary Grading Plan |
| LC1 | Conceptual Landscaping Plan |

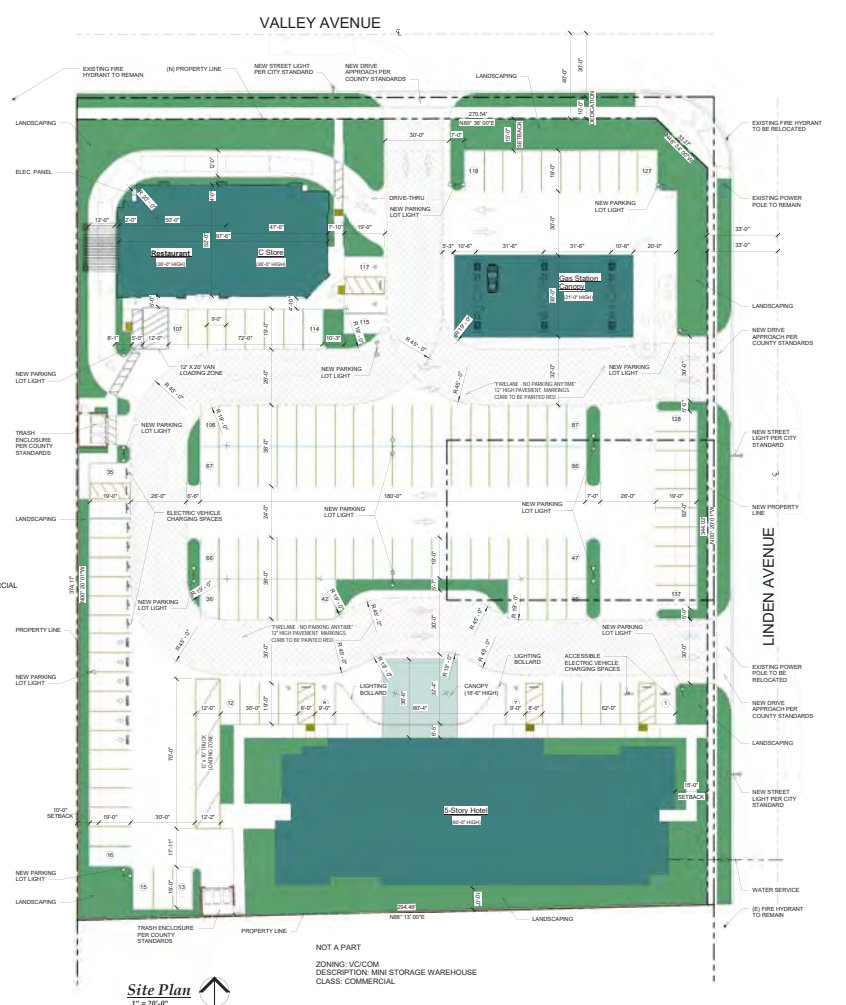
Proposed Hotel and Gas Station For:
Arrow Plaza LLC
 18497 Valley Blvd, Bloomington, CA 92316

11 Apr. 2022
 21-4377



Site Plan

PL1



Vicinity Map

Site Plan
 T = 20'-0"

C:\Users\Andresen\Documents\Projects\2020-2023\Projects\4 - Projects\2020-2023\2021\21-4377 Saber Hotel & Gas Station\Rev11\21-4377 Saber Hotel & Gas Station.rvt
 4/1/2022 2:15:02 PM
 ©2021 DOUG ANDRESEN, ARCHITECT EXPRESSLY RESERVES HIS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF DOUGLAS ANDRESEN, ARCHITECT.



Saber Hotel and Gas Station

Figure I-2
 Site Plan



xx% / (yy%) = Enter % / (Exit %)

The naming convention for intersections is North / South & East / West

xx% Trip Distribution Percentage

| Linden Ave & Valley Ave | Proj Dwy & Valley Ave | Linden Ave & N Proj Dwy | Linden Ave & S Proj Dwy |
|---|---|---|---|
| <p>25% / (0%)</p> <p>35% / (0%)</p> <p>0% / (20%)</p> <p>0% / (35%)</p> <p>0% / (25%)</p> <p>0% / (15%)</p> | <p>0% / (35%)</p> <p>35% / (0%)</p> <p>0% / (20%)</p> | <p>30% / (0%)</p> <p>30% / (0%)</p> <p>0% / (40%)</p> <p>0% / (35%)</p> | <p>30% / (0%)</p> <p>0% / (35%)</p> <p>0% / (5%)</p> <p>5% / (0%)</p> |

Table 1

| TRIP GENERATION RATES ¹ | | | | | | | | |
|---|-----------|--------------------|------------|--------------|------------|-----------|--------------|------------|
| Land Use | ITE Code | Weekday Daily | AM PEAK | | | PM PEAK | | |
| | | | Rate | In:Out Ratio | | Rate | In:Out Ratio | |
| Hotel | 310 | 7.99 trips / rm | 0.46 | 0.56 : 0.44 | | 0.59 | 0.51 : 0.49 | |
| Fast-Food Restaurant w/Drive-Through Window | 934 | 467.48 trips / ksf | 44.61 | 0.51 : 0.49 | | 33.03 | 0.52 : 0.48 | |
| Convenience Store/Gas Station | 945 | 700.43 trips / ksf | 56.52 | 0.50 : 0.50 | | 54.52 | 0.50 : 0.50 | |
| TRIP GENERATION CALCULATIONS | | | | | | | | |
| Land Use | Amount | ADT | AM PEAK | | | PM PEAK | | |
| | | | In | Out | Total | In | Out | Total |
| Hotel | 87 rm | 696 | 23 | 18 | 41 | 27 | 25 | 52 |
| <i>Internal Capture Trip Reduction</i> ³ | | -132 | -1 | -5 | -6 | -6 | -3 | -9 |
| Fast-Food Restaurant w/Drive-Through Window | 2,500 ksf | 1,169 | 58 | 54 | 112 | 44 | 39 | 83 |
| <i>Internal Capture Trip Reduction</i> ³ | | -222 | -11 | -6 | -17 | -15 | -19 | -34 |
| <i>Passby Reduction (50%)</i> ² | | -474 | -24 | -24 | -48 | -15 | -10 | -25 |
| Convenience Store/Gas Station | 2,400 ksf | 1,682 | 68 | 68 | 136 | 66 | 65 | 131 |
| <i>Internal Capture Trip Reduction</i> ³ | | -320 | -8 | -9 | -17 | -17 | -16 | -33 |
| <i>Passby Reduction (62%)</i> ² | | -1,043 | -43 | -42 | -85 | -41 | -41 | -82 |
| <i>Total Internal Capture Trip Reduction</i> ³ | | -674 | -20 | -20 | -40 | -38 | -38 | -76 |
| Total Driveway Trips | | 2,873 | 129 | 120 | 249 | 99 | 91 | 190 |
| <i>Total Passby Reduction</i> | | -1,517 | -67 | -66 | -133 | -56 | -51 | -107 |
| Net New Traffic | | 1,356 | 62 | 54 | 116 | 43 | 40 | 83 |

Notes:

1. The trip rates for the project's land use are based on the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*.
2. The passby trip rate is based on the average rates published in the *ITE Trip Generation Handbook, 3rd Edition*.
3. The internal capture trips are estimated based on the methodologies contained in the *NCHRP Report 684*. The daily percentage of 19% was based on the average of the AM and PM peak period internal capture percentages.



LEGEND

★ Project Site

VALLEY BLVD

LINDEN AVE



Source: Google Earth



Saber Hotel and Gas Station

Figure 1-1
Project Vicinity Map

Appendix B

Transit Schedules and Routes

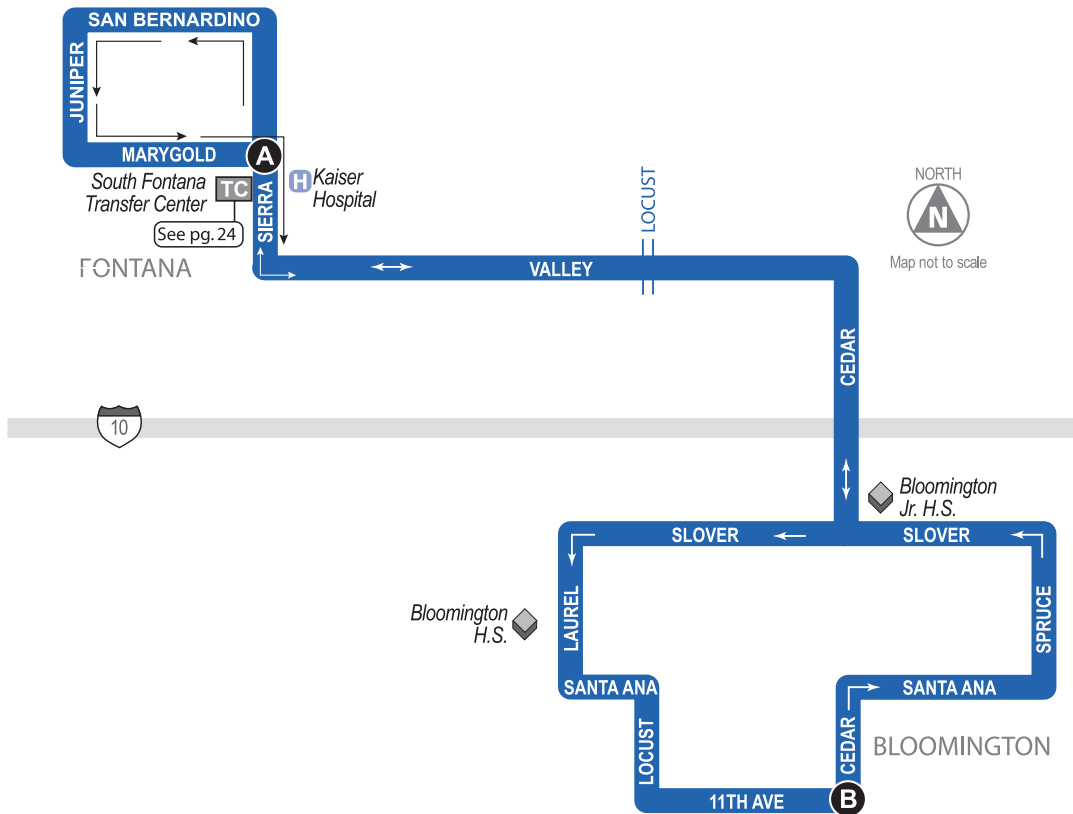
329

BLOOMINGTON - VALLEY BLVD. - KAISER

-  Bus Route
-  Timepoint - Look for the matching symbol in the timetable section.
-  Metrolink Station
-  Point of interest
-  Transfer Point
-  Transit/Transfer Center
-  Tripper Service
-  Park-and-Ride
-  Medical Center
-  Connection Route(s)

FREQUENCY

| M-F | SAT | SUN |
|-----|-----|-----|
| 60 | 60 | N/A |



ROUTE 329: MONDAY - FRIDAY

Marygold & Sierra

11th & Cedar

Marygold & Sierra

A

B

A

SOUTHBOUND

NORTHBOUND

| | | |
|-------|-------|-------|
| 6:45 | 7:10 | 7:37 |
| 7:45 | 8:10 | 8:37 |
| 8:45 | 9:10 | 9:37 |
| 9:45 | 10:10 | 10:37 |
| 10:45 | 11:10 | 11:37 |
| 11:45 | 12:10 | 12:37 |
| 12:45 | 1:10 | 1:37 |
| 1:45 | 2:10 | 2:37 |
| 2:45 | 3:10 | 3:37 |
| 3:45 | 4:10 | 4:37 |
| 4:45 | 5:10 | 5:37 |
| 5:45 | 6:10 | 6:37 |

ROUTE 329: SATURDAY

A

B

A

SOUTHBOUND

NORTHBOUND

| | | |
|-------|-------|-------|
| 7:45 | 8:10 | 8:37 |
| 8:45 | 9:10 | 9:37 |
| 9:45 | 10:10 | 10:37 |
| 10:45 | 11:10 | 11:37 |
| 11:45 | 12:10 | 12:37 |
| 12:45 | 13:10 | 13:37 |
| 1:45 | 2:10 | 2:37 |
| 2:45 | 3:10 | 3:37 |
| 3:45 | 4:10 | 4:37 |
| 4:45 | 5:10 | 5:37 |
| 5:45 | 6:10 | 6:37 |

Mini-Buses, Mega Service

Omnitrans mini-buses will serve

Routes 305, 312, 319 and 329

Omnitrans mini-buses have some of the same amenities as our large buses,
and can carry 12 passengers, 2 mobility devices and 2 bicycles.



Appendix C

Existing Traffic Volume Data

County of San Bernardino
 N/S: Linden Avenue
 E/W: Valley Boulevard
 Weather: Clear

File Name : CSB_Linden_Valley AM
 Site Code : 23522077
 Start Date : 2/1/2022
 Page No : 1

Groups Printed- Total Volume

| Start Time | Linden Avenue Southbound | | | | Valley Boulevard Westbound | | | | Linden Avenue Northbound | | | | Valley Boulevard Eastbound | | | | Int. Total |
|-------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:00 AM | 56 | 2 | 10 | 68 | 8 | 68 | 21 | 97 | 1 | 0 | 2 | 3 | 7 | 79 | 0 | 86 | 254 |
| 07:15 AM | 42 | 1 | 8 | 51 | 8 | 92 | 21 | 121 | 1 | 0 | 2 | 3 | 9 | 89 | 0 | 98 | 273 |
| 07:30 AM | 67 | 0 | 10 | 77 | 18 | 99 | 34 | 151 | 1 | 0 | 2 | 3 | 15 | 85 | 2 | 102 | 333 |
| 07:45 AM | 48 | 5 | 7 | 60 | 34 | 123 | 22 | 179 | 2 | 0 | 0 | 2 | 9 | 104 | 3 | 116 | 357 |
| Total | 213 | 8 | 35 | 256 | 68 | 382 | 98 | 548 | 5 | 0 | 6 | 11 | 40 | 357 | 5 | 402 | 1217 |
| 08:00 AM | 49 | 5 | 8 | 62 | 22 | 105 | 25 | 152 | 3 | 3 | 4 | 10 | 13 | 95 | 2 | 110 | 334 |
| 08:15 AM | 44 | 4 | 10 | 58 | 19 | 100 | 14 | 133 | 3 | 1 | 2 | 6 | 22 | 119 | 1 | 142 | 339 |
| 08:30 AM | 40 | 4 | 10 | 54 | 18 | 95 | 13 | 126 | 1 | 3 | 2 | 6 | 15 | 98 | 0 | 113 | 299 |
| 08:45 AM | 31 | 4 | 17 | 52 | 24 | 93 | 12 | 129 | 3 | 2 | 3 | 8 | 21 | 92 | 1 | 114 | 303 |
| Total | 164 | 17 | 45 | 226 | 83 | 393 | 64 | 540 | 10 | 9 | 11 | 30 | 71 | 404 | 4 | 479 | 1275 |
| Grand Total | 377 | 25 | 80 | 482 | 151 | 775 | 162 | 1088 | 15 | 9 | 17 | 41 | 111 | 761 | 9 | 881 | 2492 |
| Apprch % | 78.2 | 5.2 | 16.6 | | 13.9 | 71.2 | 14.9 | | 36.6 | 22 | 41.5 | | 12.6 | 86.4 | 1 | | |
| Total % | 15.1 | 1 | 3.2 | 19.3 | 6.1 | 31.1 | 6.5 | 43.7 | 0.6 | 0.4 | 0.7 | 1.6 | 4.5 | 30.5 | 0.4 | 35.4 | |

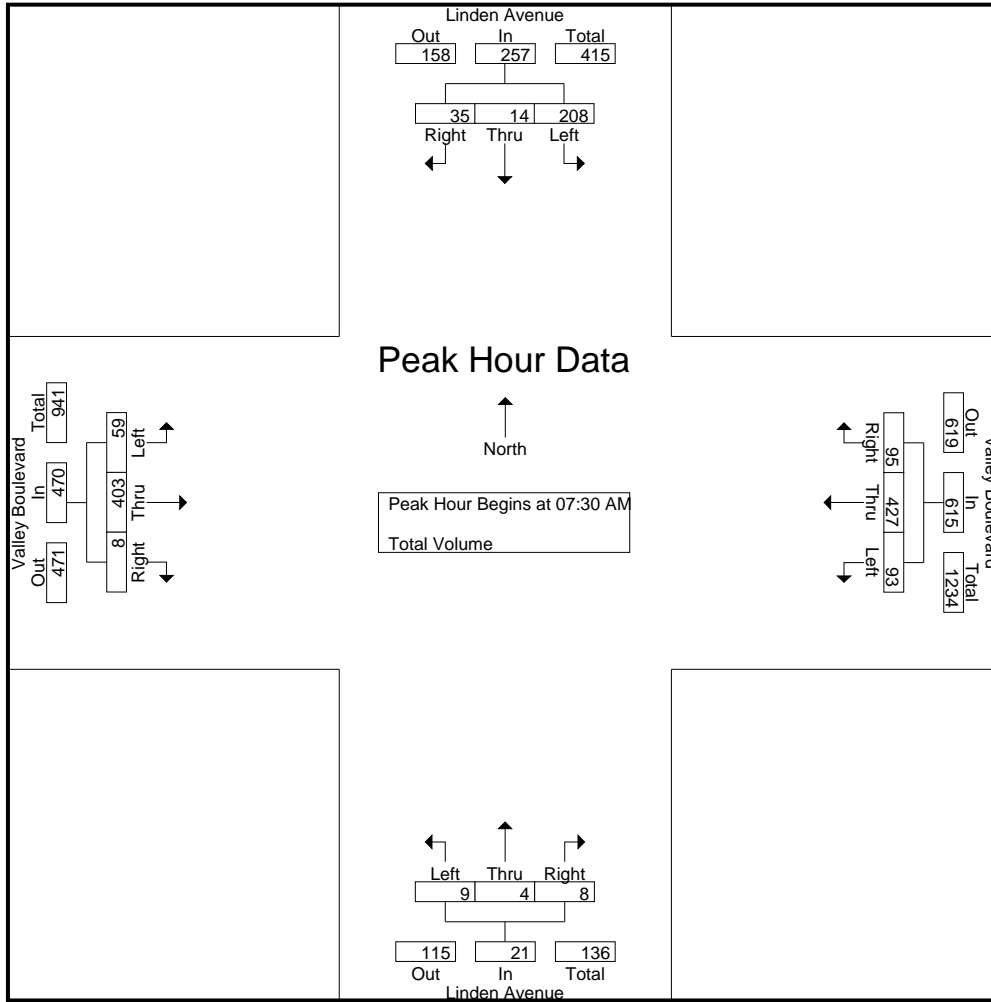
| Start Time | Linden Avenue Southbound | | | | Valley Boulevard Westbound | | | | Linden Avenue Northbound | | | | Valley Boulevard Eastbound | | | | Int. Total |
|--------------|--------------------------|----------|-----------|------------|----------------------------|------------|-----------|------------|--------------------------|----------|----------|------------|----------------------------|------------|----------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:30 AM | 67 | 0 | 10 | 77 | 18 | 99 | 34 | 151 | 1 | 0 | 2 | 3 | 15 | 85 | 2 | 102 | 333 |
| 07:45 AM | 48 | 5 | 7 | 60 | 34 | 123 | 22 | 179 | 2 | 0 | 0 | 2 | 9 | 104 | 3 | 116 | 357 |
| 08:00 AM | 49 | 5 | 8 | 62 | 22 | 105 | 25 | 152 | 3 | 3 | 4 | 10 | 13 | 95 | 2 | 110 | 334 |
| 08:15 AM | 44 | 4 | 10 | 58 | 19 | 100 | 14 | 133 | 3 | 1 | 2 | 6 | 22 | 119 | 1 | 142 | 339 |
| Total Volume | 208 | 14 | 35 | 257 | 93 | 427 | 95 | 615 | 9 | 4 | 8 | 21 | 59 | 403 | 8 | 470 | 1363 |
| % App. Total | 80.9 | 5.4 | 13.6 | | 15.1 | 69.4 | 15.4 | | 42.9 | 19 | 38.1 | | 12.6 | 85.7 | 1.7 | | |
| PHF | .776 | .700 | .875 | .834 | .684 | .868 | .699 | .859 | .750 | .333 | .500 | .525 | .670 | .847 | .667 | .827 | .954 |

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

County of San Bernardino
 N/S: Linden Avenue
 E/W: Valley Boulevard
 Weather: Clear

File Name : CSB_Linden_Valley AM
 Site Code : 23522077
 Start Date : 2/1/2022
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

| | 07:30 AM | | | | 07:30 AM | | | | 08:00 AM | | | | 07:45 AM | | | |
|--------------|-----------|----------|-----------|-----------|-----------|------------|-----------|------------|----------|----------|----------|-----------|-----------|------------|----------|------------|
| +0 mins. | 67 | 0 | 10 | 77 | 18 | 99 | 34 | 151 | 3 | 3 | 4 | 10 | 9 | 104 | 3 | 116 |
| +15 mins. | 48 | 5 | 7 | 60 | 34 | 123 | 22 | 179 | 3 | 1 | 2 | 6 | 13 | 95 | 2 | 110 |
| +30 mins. | 49 | 5 | 8 | 62 | 22 | 105 | 25 | 152 | 1 | 3 | 2 | 6 | 22 | 119 | 1 | 142 |
| +45 mins. | 44 | 4 | 10 | 58 | 19 | 100 | 14 | 133 | 3 | 2 | 3 | 8 | 15 | 98 | 0 | 113 |
| Total Volume | 208 | 14 | 35 | 257 | 93 | 427 | 95 | 615 | 10 | 9 | 11 | 30 | 59 | 416 | 6 | 481 |
| % App. Total | 80.9 | 5.4 | 13.6 | | 15.1 | 69.4 | 15.4 | | 33.3 | 30 | 36.7 | | 12.3 | 86.5 | 1.2 | |
| PHF | .776 | .700 | .875 | .834 | .684 | .868 | .699 | .859 | .833 | .750 | .688 | .750 | .670 | .874 | .500 | .847 |

County of San Bernardino
 N/S: Linden Avenue
 E/W: Valley Boulevard
 Weather: Clear

File Name : CSB_Linden_Valley PM
 Site Code : 23522077
 Start Date : 2/1/2022
 Page No : 1

Groups Printed- Total Volume

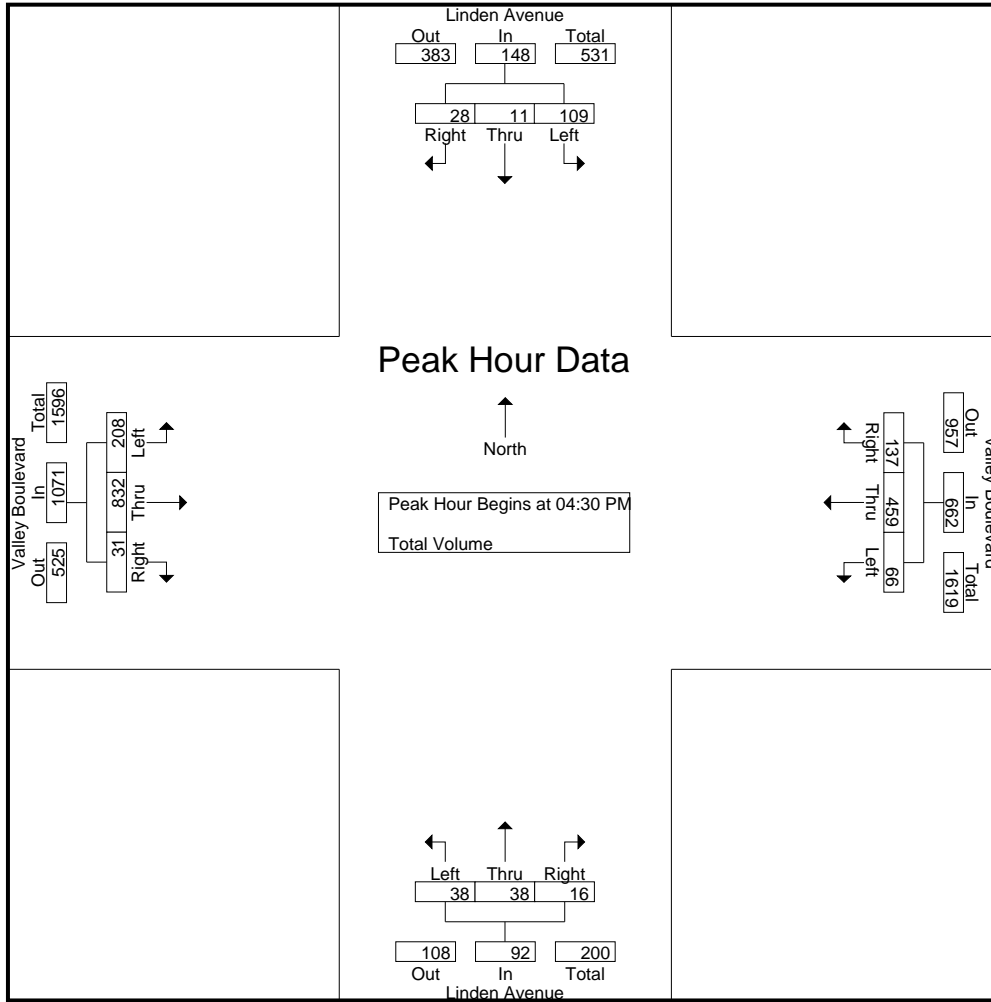
| Start Time | Linden Avenue Southbound | | | | Valley Boulevard Westbound | | | | Linden Avenue Northbound | | | | Valley Boulevard Eastbound | | | | Int. Total |
|-------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 04:00 PM | 26 | 4 | 7 | 37 | 24 | 98 | 29 | 151 | 8 | 12 | 6 | 26 | 40 | 195 | 7 | 242 | 456 |
| 04:15 PM | 20 | 6 | 17 | 43 | 10 | 94 | 34 | 138 | 7 | 9 | 4 | 20 | 47 | 216 | 9 | 272 | 473 |
| 04:30 PM | 32 | 2 | 6 | 40 | 16 | 92 | 19 | 127 | 7 | 7 | 2 | 16 | 52 | 216 | 11 | 279 | 462 |
| 04:45 PM | 25 | 4 | 9 | 38 | 21 | 126 | 36 | 183 | 10 | 11 | 5 | 26 | 57 | 212 | 7 | 276 | 523 |
| Total | 103 | 16 | 39 | 158 | 71 | 410 | 118 | 599 | 32 | 39 | 17 | 88 | 196 | 839 | 34 | 1069 | 1914 |
| 05:00 PM | 31 | 1 | 7 | 39 | 13 | 113 | 43 | 169 | 14 | 13 | 4 | 31 | 49 | 213 | 10 | 272 | 511 |
| 05:15 PM | 21 | 4 | 6 | 31 | 16 | 128 | 39 | 183 | 7 | 7 | 5 | 19 | 50 | 191 | 3 | 244 | 477 |
| 05:30 PM | 30 | 2 | 20 | 52 | 12 | 92 | 30 | 134 | 6 | 3 | 2 | 11 | 48 | 186 | 1 | 235 | 432 |
| 05:45 PM | 29 | 0 | 13 | 42 | 11 | 107 | 25 | 143 | 1 | 6 | 2 | 9 | 42 | 182 | 2 | 226 | 420 |
| Total | 111 | 7 | 46 | 164 | 52 | 440 | 137 | 629 | 28 | 29 | 13 | 70 | 189 | 772 | 16 | 977 | 1840 |
| Grand Total | 214 | 23 | 85 | 322 | 123 | 850 | 255 | 1228 | 60 | 68 | 30 | 158 | 385 | 1611 | 50 | 2046 | 3754 |
| Apprch % | 66.5 | 7.1 | 26.4 | | 10 | 69.2 | 20.8 | | 38 | 43 | 19 | | 18.8 | 78.7 | 2.4 | | |
| Total % | 5.7 | 0.6 | 2.3 | 8.6 | 3.3 | 22.6 | 6.8 | 32.7 | 1.6 | 1.8 | 0.8 | 4.2 | 10.3 | 42.9 | 1.3 | 54.5 | |

| Start Time | Linden Avenue Southbound | | | | Valley Boulevard Westbound | | | | Linden Avenue Northbound | | | | Valley Boulevard Eastbound | | | | Int. Total |
|--------------|--------------------------|----------|----------|------------|----------------------------|------------|-----------|------------|--------------------------|-----------|----------|------------|----------------------------|------------|-----------|------------|------------|
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 04:30 PM | 32 | 2 | 6 | 40 | 16 | 92 | 19 | 127 | 7 | 7 | 2 | 16 | 52 | 216 | 11 | 279 | 462 |
| 04:45 PM | 25 | 4 | 9 | 38 | 21 | 126 | 36 | 183 | 10 | 11 | 5 | 26 | 57 | 212 | 7 | 276 | 523 |
| 05:00 PM | 31 | 1 | 7 | 39 | 13 | 113 | 43 | 169 | 14 | 13 | 4 | 31 | 49 | 213 | 10 | 272 | 511 |
| 05:15 PM | 21 | 4 | 6 | 31 | 16 | 128 | 39 | 183 | 7 | 7 | 5 | 19 | 50 | 191 | 3 | 244 | 477 |
| Total Volume | 109 | 11 | 28 | 148 | 66 | 459 | 137 | 662 | 38 | 38 | 16 | 92 | 208 | 832 | 31 | 1071 | 1973 |
| % App. Total | 73.6 | 7.4 | 18.9 | | 10 | 69.3 | 20.7 | | 41.3 | 41.3 | 17.4 | | 19.4 | 77.7 | 2.9 | | |
| PHF | .852 | .688 | .778 | .925 | .786 | .896 | .797 | .904 | .679 | .731 | .800 | .742 | .912 | .963 | .705 | .960 | .943 |

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

County of San Bernardino
 N/S: Linden Avenue
 E/W: Valley Boulevard
 Weather: Clear

File Name : CSB_Linden_Valley PM
 Site Code : 23522077
 Start Date : 2/1/2022
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

| | 05:00 PM | | | | 04:45 PM | | | | 04:15 PM | | | | 04:15 PM | | | |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins. | 31 | 1 | 7 | 39 | 21 | 126 | 36 | 183 | 7 | 9 | 4 | 20 | 47 | 216 | 9 | 272 |
| +15 mins. | 21 | 4 | 6 | 31 | 13 | 113 | 43 | 169 | 7 | 7 | 2 | 16 | 52 | 216 | 11 | 279 |
| +30 mins. | 30 | 2 | 20 | 52 | 16 | 128 | 39 | 183 | 10 | 11 | 5 | 26 | 57 | 212 | 7 | 276 |
| +45 mins. | 29 | 0 | 13 | 42 | 12 | 92 | 30 | 134 | 14 | 13 | 4 | 31 | 49 | 213 | 10 | 272 |
| Total Volume | 111 | 7 | 46 | 164 | 62 | 459 | 148 | 669 | 38 | 40 | 15 | 93 | 205 | 857 | 37 | 1099 |
| % App. Total | 67.7 | 4.3 | 28 | | 9.3 | 68.6 | 22.1 | | 40.9 | 43 | 16.1 | | 18.7 | 78 | 3.4 | |
| PHF | .895 | .438 | .575 | .788 | .738 | .896 | .860 | .914 | .679 | .769 | .750 | .750 | .899 | .992 | .841 | .985 |

Counts Unlimited, Inc.

County of San Bernardino
 Linden Avenue
 S/ Valley Boulevard
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

CSB002
 Site Code: 235-22077

| Start Time | 01-Feb-22 Tue | Northbound | | Hour Totals | | Southbound | | Hour Totals | | Combined Totals | |
|-----------------------|------------------|------------|-----------|-------------|-----------|------------|-----------|-------------|-----------|-----------------|-----------|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 0 | 26 | | | 1 | 37 | | | | |
| 12:15 | | 0 | 16 | | | 1 | 31 | | | | |
| 12:30 | | 0 | 16 | | | 1 | 37 | | | | |
| 12:45 | | 0 | 17 | 0 | 75 | 0 | 42 | 3 | 147 | 3 | 222 |
| 01:00 | | 0 | 15 | | | 0 | 54 | | | | |
| 01:15 | | 0 | 24 | | | 2 | 38 | | | | |
| 01:30 | | 0 | 20 | | | 1 | 50 | | | | |
| 01:45 | | 0 | 16 | 0 | 75 | 1 | 30 | 4 | 172 | 4 | 247 |
| 02:00 | | 0 | 23 | | | 0 | 41 | | | | |
| 02:15 | | 0 | 16 | | | 0 | 33 | | | | |
| 02:30 | | 0 | 32 | | | 2 | 47 | | | | |
| 02:45 | | 0 | 12 | 0 | 83 | 1 | 31 | 3 | 152 | 3 | 235 |
| 03:00 | | 0 | 29 | | | 0 | 42 | | | | |
| 03:15 | | 0 | 24 | | | 0 | 38 | | | | |
| 03:30 | | 0 | 14 | | | 0 | 30 | | | | |
| 03:45 | | 0 | 20 | 0 | 87 | 3 | 40 | 3 | 150 | 3 | 237 |
| 04:00 | | 0 | 26 | | | 3 | 35 | | | | |
| 04:15 | | 2 | 20 | | | 3 | 25 | | | | |
| 04:30 | | 0 | 16 | | | 2 | 29 | | | | |
| 04:45 | | 1 | 26 | 3 | 88 | 1 | 32 | 9 | 121 | 12 | 209 |
| 05:00 | | 0 | 31 | | | 4 | 24 | | | | |
| 05:15 | | 0 | 19 | | | 4 | 23 | | | | |
| 05:30 | | 0 | 11 | | | 6 | 15 | | | | |
| 05:45 | | 1 | 9 | 1 | 70 | 8 | 13 | 22 | 75 | 23 | 145 |
| 06:00 | | 1 | 8 | | | 7 | 9 | | | | |
| 06:15 | | 1 | 1 | | | 9 | 9 | | | | |
| 06:30 | | 1 | 2 | | | 5 | 7 | | | | |
| 06:45 | | 2 | 10 | 5 | 21 | 8 | 14 | 29 | 39 | 34 | 60 |
| 07:00 | | 3 | 4 | | | 10 | 11 | | | | |
| 07:15 | | 3 | 4 | | | 9 | 13 | | | | |
| 07:30 | | 3 | 6 | | | 20 | 7 | | | | |
| 07:45 | | 2 | 6 | 11 | 20 | 42 | 7 | 81 | 38 | 92 | 58 |
| 08:00 | | 10 | 2 | | | 29 | 8 | | | | |
| 08:15 | | 6 | 0 | | | 24 | 7 | | | | |
| 08:30 | | 6 | 0 | | | 22 | 8 | | | | |
| 08:45 | | 8 | 0 | 30 | 2 | 29 | 3 | 104 | 26 | 134 | 28 |
| 09:00 | | 12 | 3 | | | 30 | 4 | | | | |
| 09:15 | | 17 | 1 | | | 33 | 9 | | | | |
| 09:30 | | 14 | 1 | | | 27 | 5 | | | | |
| 09:45 | | 19 | 0 | 62 | 5 | 45 | 3 | 135 | 21 | 197 | 26 |
| 10:00 | | 18 | 1 | | | 35 | 1 | | | | |
| 10:15 | | 22 | 0 | | | 27 | 2 | | | | |
| 10:30 | | 15 | 0 | | | 46 | 2 | | | | |
| 10:45 | | 27 | 1 | 82 | 2 | 33 | 3 | 141 | 8 | 223 | 10 |
| 11:00 | | 26 | 0 | | | 38 | 1 | | | | |
| 11:15 | | 15 | 0 | | | 41 | 1 | | | | |
| 11:30 | | 20 | 0 | | | 48 | 0 | | | | |
| 11:45 | | 29 | 0 | 90 | 0 | 39 | 5 | 166 | 7 | 256 | 7 |
| Total | | 284 | 528 | 284 | 528 | 700 | 956 | 700 | 956 | 984 | 1484 |
| Combined Total | | 812 | | 812 | | 1656 | | 1656 | | 2468 | |
| AM Peak | - | 10:15 | - | - | - | 11:00 | - | - | - | - | - |
| Vol. | - | 90 | - | - | - | 166 | - | - | - | - | - |
| P.H.F. | - | 0.833 | - | - | - | 0.865 | - | - | - | - | - |
| PM Peak | - | - | 02:30 | - | - | - | 00:45 | - | - | - | - |
| Vol. | - | - | 97 | - | - | - | 184 | - | - | - | - |
| P.H.F. | - | - | 0.758 | - | - | - | 0.852 | - | - | - | - |
| Percentage | | 35.0% | 65.0% | | | 42.3% | 57.7% | | | | |
| ADT/AADT | | ADT 2,468 | | AADT 2,468 | | | | | | | |

Counts Unlimited, Inc.

County of San Bernardino
 Valley Boulevard
 W/ Linden Avenue
 24 Hour Directional Volume Count

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

CSB001
 Site Code: 235-22077

| Start Time | 01-Feb-22 Tue | Eastbound | | Hour Totals | | Westbound | | Hour Totals | | Combined Totals | |
|-----------------------|------------------|--------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-----------------|--------------|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 14 | 171 | | | 13 | 132 | | | | |
| 12:15 | | 19 | 191 | | | 7 | 133 | | | | |
| 12:30 | | 7 | 147 | | | 10 | 123 | | | | |
| 12:45 | | 13 | 167 | 53 | 676 | 6 | 166 | 36 | 554 | 89 | 1230 |
| 01:00 | | 14 | 173 | | | 8 | 137 | | | | |
| 01:15 | | 9 | 150 | | | 12 | 123 | | | | |
| 01:30 | | 6 | 180 | | | 9 | 130 | | | | |
| 01:45 | | 10 | 147 | 39 | 650 | 6 | 125 | 35 | 515 | 74 | 1165 |
| 02:00 | | 9 | 166 | | | 2 | 114 | | | | |
| 02:15 | | 5 | 192 | | | 7 | 146 | | | | |
| 02:30 | | 9 | 217 | | | 7 | 142 | | | | |
| 02:45 | | 14 | 203 | 37 | 778 | 15 | 154 | 31 | 556 | 68 | 1334 |
| 03:00 | | 11 | 240 | | | 8 | 153 | | | | |
| 03:15 | | 9 | 238 | | | 15 | 151 | | | | |
| 03:30 | | 14 | 249 | | | 8 | 131 | | | | |
| 03:45 | | 19 | 254 | 53 | 981 | 9 | 160 | 40 | 595 | 93 | 1576 |
| 04:00 | | 20 | 242 | | | 18 | 113 | | | | |
| 04:15 | | 28 | 272 | | | 8 | 118 | | | | |
| 04:30 | | 41 | 279 | | | 26 | 105 | | | | |
| 04:45 | | 44 | 276 | 133 | 1069 | 24 | 145 | 76 | 481 | 209 | 1550 |
| 05:00 | | 38 | 272 | | | 25 | 134 | | | | |
| 05:15 | | 39 | 244 | | | 24 | 141 | | | | |
| 05:30 | | 57 | 235 | | | 42 | 118 | | | | |
| 05:45 | | 47 | 226 | 181 | 977 | 52 | 121 | 143 | 514 | 324 | 1491 |
| 06:00 | | 52 | 179 | | | 34 | 108 | | | | |
| 06:15 | | 45 | 160 | | | 55 | 120 | | | | |
| 06:30 | | 66 | 164 | | | 79 | 93 | | | | |
| 06:45 | | 61 | 141 | 224 | 644 | 96 | 85 | 264 | 406 | 488 | 1050 |
| 07:00 | | 86 | 116 | | | 79 | 71 | | | | |
| 07:15 | | 98 | 98 | | | 101 | 71 | | | | |
| 07:30 | | 102 | 89 | | | 110 | 66 | | | | |
| 07:45 | | 116 | 92 | 402 | 395 | 132 | 50 | 422 | 258 | 824 | 653 |
| 08:00 | | 110 | 61 | | | 116 | 62 | | | | |
| 08:15 | | 142 | 68 | | | 113 | 54 | | | | |
| 08:30 | | 113 | 52 | | | 106 | 43 | | | | |
| 08:45 | | 114 | 39 | 479 | 220 | 113 | 48 | 448 | 207 | 927 | 427 |
| 09:00 | | 137 | 47 | | | 117 | 47 | | | | |
| 09:15 | | 120 | 57 | | | 133 | 35 | | | | |
| 09:30 | | 118 | 45 | | | 106 | 33 | | | | |
| 09:45 | | 114 | 34 | 489 | 183 | 121 | 24 | 477 | 139 | 966 | 322 |
| 10:00 | | 114 | 44 | | | 118 | 33 | | | | |
| 10:15 | | 126 | 18 | | | 145 | 21 | | | | |
| 10:30 | | 160 | 22 | | | 120 | 30 | | | | |
| 10:45 | | 161 | 25 | 561 | 109 | 129 | 21 | 512 | 105 | 1073 | 214 |
| 11:00 | | 155 | 31 | | | 112 | 17 | | | | |
| 11:15 | | 159 | 25 | | | 124 | 14 | | | | |
| 11:30 | | 148 | 25 | | | 137 | 13 | | | | |
| 11:45 | | 152 | 12 | 614 | 93 | 141 | 17 | 514 | 61 | 1128 | 154 |
| Total | | 3265 | 6775 | 3265 | 6775 | 2998 | 4391 | 2998 | 4391 | 6263 | 11166 |
| Combined Total | | 10040 | | 10040 | | 7389 | | 7389 | | 17429 | |
| AM Peak | - | 10:30 | - | - | - | 11:00 | - | - | - | - | - |
| Vol. | - | 635 | - | - | - | 514 | - | - | - | - | - |
| P.H.F. | - | 0.986 | - | - | - | 0.886 | - | - | - | - | - |
| PM Peak | - | - | 04:15 | - | - | - | 02:30 | - | - | - | - |
| Vol. | - | - | 1099 | - | - | - | 600 | - | - | - | - |
| P.H.F. | - | - | 0.985 | - | - | - | 0.974 | - | - | - | - |
| Percentage | | 32.5% | 67.5% | | | 40.6% | 59.4% | | | | |
| ADT/AADT | | ADT 17,429 | | AADT 17,429 | | | | | | | |

Appendix D

Intersection LOS Worksheets

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Existing Conditions
Timing Plan: AM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 59 | 403 | 8 | 93 | 427 | 95 | 9 | 4 | 8 | 208 | 14 | 35 |
| Future Volume (veh/h) | 59 | 403 | 8 | 93 | 427 | 95 | 9 | 4 | 8 | 208 | 14 | 35 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 62 | 424 | 8 | 98 | 449 | 100 | 9 | 4 | 8 | 219 | 15 | 37 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 101 | 835 | 16 | 137 | 737 | 163 | 273 | 129 | 162 | 457 | 32 | 50 |
| Arrive On Green | 0.06 | 0.25 | 0.25 | 0.09 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1594 | 3380 | 64 | 1594 | 2740 | 606 | 512 | 490 | 617 | 1071 | 122 | 189 |
| Grp Volume(v), veh/h | 62 | 211 | 221 | 98 | 275 | 274 | 21 | 0 | 0 | 271 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1760 | 1594 | 1683 | 1663 | 1620 | 0 | 0 | 1382 | 0 | 0 |
| Q Serve(g_s), s | 1.4 | 4.0 | 4.0 | 2.2 | 5.3 | 5.4 | 0.0 | 0.0 | 0.0 | 6.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.4 | 4.0 | 4.0 | 2.2 | 5.3 | 5.4 | 0.4 | 0.0 | 0.0 | 6.6 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.36 | 0.43 | | 0.38 | 0.81 | | 0.14 |
| Lane Grp Cap(c), veh/h | 101 | 416 | 435 | 137 | 453 | 447 | 564 | 0 | 0 | 539 | 0 | 0 |
| V/C Ratio(X) | 0.61 | 0.51 | 0.51 | 0.72 | 0.61 | 0.61 | 0.04 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 301 | 863 | 902 | 301 | 863 | 852 | 924 | 0 | 0 | 881 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 16.9 | 12.0 | 12.0 | 16.5 | 11.8 | 11.9 | 10.2 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 5.8 | 1.0 | 0.9 | 6.9 | 1.3 | 1.4 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 1.3 | 1.3 | 0.9 | 1.7 | 1.7 | 0.1 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 22.7 | 13.0 | 12.9 | 23.4 | 13.1 | 13.2 | 10.2 | 0.0 | 0.0 | 13.2 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 494 | | | 647 | | | 21 | | | 271 | |
| Approach Delay, s/veh | | 14.2 | | | 14.7 | | | 10.2 | | | 13.2 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.2 | 14.2 | | 14.7 | 7.4 | 15.0 | | 14.7 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 7.0 | 19.0 | | 19.0 | 7.0 | 19.0 | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.2 | 6.0 | | 8.6 | 3.4 | 7.4 | | 2.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.1 | | 1.1 | 0.0 | 2.6 | | 0.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.2 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Existing Conditions
Timing Plan: PM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 208 | 832 | 31 | 66 | 459 | 137 | 38 | 38 | 16 | 109 | 11 | 28 |
| Future Volume (veh/h) | 208 | 832 | 31 | 66 | 459 | 137 | 38 | 38 | 16 | 109 | 11 | 28 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 221 | 885 | 33 | 70 | 488 | 146 | 40 | 40 | 17 | 116 | 12 | 30 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 272 | 1293 | 48 | 108 | 737 | 219 | 205 | 142 | 46 | 320 | 29 | 45 |
| Arrive On Green | 0.17 | 0.39 | 0.39 | 0.07 | 0.29 | 0.29 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1594 | 3310 | 123 | 1594 | 2558 | 761 | 470 | 877 | 286 | 998 | 181 | 276 |
| Grp Volume(v), veh/h | 221 | 450 | 468 | 70 | 320 | 314 | 97 | 0 | 0 | 158 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1750 | 1594 | 1683 | 1635 | 1633 | 0 | 0 | 1456 | 0 | 0 |
| Q Serve(g_s), s | 5.3 | 8.8 | 8.8 | 1.7 | 6.6 | 6.7 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.3 | 8.8 | 8.8 | 1.7 | 6.6 | 6.7 | 2.0 | 0.0 | 0.0 | 3.8 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 0.47 | 0.41 | | 0.18 | 0.73 | | 0.19 |
| Lane Grp Cap(c), veh/h | 272 | 658 | 684 | 108 | 485 | 471 | 394 | 0 | 0 | 394 | 0 | 0 |
| V/C Ratio(X) | 0.81 | 0.68 | 0.68 | 0.65 | 0.66 | 0.67 | 0.25 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 362 | 936 | 972 | 201 | 765 | 743 | 831 | 0 | 0 | 787 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 15.8 | 10.0 | 10.0 | 18.0 | 12.4 | 12.4 | 14.7 | 0.0 | 0.0 | 15.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 10.0 | 1.3 | 1.2 | 6.4 | 1.5 | 1.6 | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.4 | 2.6 | 2.7 | 0.7 | 2.2 | 2.1 | 0.7 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 25.9 | 11.3 | 11.2 | 24.3 | 13.9 | 14.0 | 15.0 | 0.0 | 0.0 | 16.0 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 1139 | | | 704 | | | 97 | | | | 158 |
| Approach Delay, s/veh | | 14.1 | | | 15.0 | | | 15.0 | | | | 16.0 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 7.7 | 20.5 | | 11.4 | 11.7 | 16.4 | | 11.4 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 5.0 | 22.0 | | 18.0 | 9.0 | 18.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 3.7 | 10.8 | | 5.8 | 7.3 | 8.7 | | 4.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.5 | | 0.6 | 0.1 | 2.7 | | 0.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.6 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Opening Year 2023
Timing Plan: AM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Traffic Volume (veh/h) | 60 | 426 | 8 | 95 | 441 | 97 | 9 | 4 | 8 | 212 | 14 | 36 |
| Future Volume (veh/h) | 60 | 426 | 8 | 95 | 441 | 97 | 9 | 4 | 8 | 212 | 14 | 36 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 63 | 448 | 8 | 100 | 464 | 102 | 9 | 4 | 8 | 223 | 15 | 38 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 102 | 849 | 15 | 137 | 750 | 164 | 273 | 129 | 163 | 457 | 31 | 50 |
| Arrive On Green | 0.06 | 0.25 | 0.25 | 0.09 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1594 | 3384 | 60 | 1594 | 2747 | 600 | 515 | 486 | 616 | 1073 | 118 | 190 |
| Grp Volume(v), veh/h | 63 | 223 | 233 | 100 | 283 | 283 | 21 | 0 | 0 | 276 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1761 | 1594 | 1683 | 1664 | 1616 | 0 | 0 | 1381 | 0 | 0 |
| Q Serve(g_s), s | 1.5 | 4.3 | 4.3 | 2.3 | 5.5 | 5.6 | 0.0 | 0.0 | 0.0 | 6.5 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.5 | 4.3 | 4.3 | 2.3 | 5.5 | 5.6 | 0.4 | 0.0 | 0.0 | 6.9 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.36 | 0.43 | | 0.38 | 0.81 | | 0.14 |
| Lane Grp Cap(c), veh/h | 102 | 422 | 442 | 137 | 459 | 454 | 565 | 0 | 0 | 539 | 0 | 0 |
| V/C Ratio(X) | 0.62 | 0.53 | 0.53 | 0.73 | 0.62 | 0.62 | 0.04 | 0.00 | 0.00 | 0.51 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 296 | 848 | 888 | 296 | 848 | 839 | 908 | 0 | 0 | 866 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 17.2 | 12.2 | 12.2 | 16.8 | 12.0 | 12.0 | 10.3 | 0.0 | 0.0 | 12.7 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 5.9 | 1.0 | 1.0 | 7.2 | 1.3 | 1.4 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 1.4 | 1.5 | 1.0 | 1.8 | 1.8 | 0.1 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.1 | 13.2 | 13.2 | 24.0 | 13.3 | 13.4 | 10.3 | 0.0 | 0.0 | 13.4 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 519 | | | 666 | | | 21 | | | 276 | |
| Approach Delay, s/veh | | 14.4 | | | 15.0 | | | 10.3 | | | 13.4 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.2 | 14.5 | | 15.0 | 7.4 | 15.3 | | 15.0 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 7.0 | 19.0 | | 19.0 | 7.0 | 19.0 | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.3 | 6.3 | | 8.9 | 3.5 | 7.6 | | 2.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.2 | | 1.1 | 0.0 | 2.7 | | 0.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 14.4 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Opening Year 2023
Timing Plan: PM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 212 | 865 | 32 | 67 | 497 | 140 | 39 | 39 | 16 | 111 | 11 | 29 |
| Future Volume (veh/h) | 212 | 865 | 32 | 67 | 497 | 140 | 39 | 39 | 16 | 111 | 11 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 226 | 920 | 34 | 71 | 529 | 149 | 41 | 41 | 17 | 118 | 12 | 31 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 276 | 1335 | 49 | 108 | 772 | 217 | 201 | 143 | 46 | 315 | 29 | 46 |
| Arrive On Green | 0.17 | 0.40 | 0.40 | 0.07 | 0.30 | 0.30 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1594 | 3311 | 122 | 1594 | 2596 | 728 | 473 | 882 | 281 | 999 | 177 | 281 |
| Grp Volume(v), veh/h | 226 | 468 | 486 | 71 | 342 | 336 | 99 | 0 | 0 | 161 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1750 | 1594 | 1683 | 1641 | 1636 | 0 | 0 | 1457 | 0 | 0 |
| Q Serve(g_s), s | 5.6 | 9.4 | 9.4 | 1.8 | 7.3 | 7.4 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.6 | 9.4 | 9.4 | 1.8 | 7.3 | 7.4 | 2.1 | 0.0 | 0.0 | 4.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 0.44 | 0.41 | | 0.17 | 0.73 | | 0.19 |
| Lane Grp Cap(c), veh/h | 276 | 679 | 706 | 108 | 501 | 488 | 390 | 0 | 0 | 389 | 0 | 0 |
| V/C Ratio(X) | 0.82 | 0.69 | 0.69 | 0.66 | 0.68 | 0.69 | 0.25 | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 351 | 905 | 941 | 195 | 740 | 722 | 805 | 0 | 0 | 761 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 16.3 | 10.1 | 10.1 | 18.6 | 12.7 | 12.7 | 15.2 | 0.0 | 0.0 | 15.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 11.4 | 1.4 | 1.4 | 6.7 | 1.7 | 1.7 | 0.3 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.6 | 2.8 | 2.9 | 0.8 | 2.4 | 2.4 | 0.7 | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 27.7 | 11.5 | 11.4 | 25.3 | 14.3 | 14.4 | 15.6 | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 1180 | | | 749 | | | 99 | | | | 161 |
| Approach Delay, s/veh | | 14.6 | | | 15.4 | | | 15.6 | | | | 16.6 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 7.8 | 21.5 | | 11.7 | 12.1 | 17.2 | | 11.7 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 5.0 | 22.0 | | 18.0 | 9.0 | 18.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 3.8 | 11.4 | | 6.0 | 7.6 | 9.4 | | 4.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.5 | | 0.6 | 0.1 | 2.8 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 15.1 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Opening Year 2023 w/Proj
Timing Plan: AM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 437 | 8 | 147 | 413 | 97 | 55 | 18 | 16 | 212 | 31 | 36 |
| Future Volume (veh/h) | 60 | 437 | 8 | 147 | 413 | 97 | 55 | 18 | 16 | 212 | 31 | 36 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 63 | 460 | 8 | 155 | 435 | 102 | 58 | 19 | 17 | 223 | 33 | 38 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 101 | 774 | 13 | 191 | 773 | 180 | 369 | 117 | 74 | 439 | 54 | 49 |
| Arrive On Green | 0.06 | 0.23 | 0.23 | 0.12 | 0.29 | 0.29 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1594 | 3386 | 59 | 1594 | 2711 | 631 | 822 | 435 | 278 | 1035 | 202 | 184 |
| Grp Volume(v), veh/h | 63 | 229 | 239 | 155 | 269 | 268 | 94 | 0 | 0 | 294 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1761 | 1594 | 1683 | 1658 | 1534 | 0 | 0 | 1421 | 0 | 0 |
| Q Serve(g_s), s | 1.5 | 4.7 | 4.8 | 3.7 | 5.3 | 5.4 | 0.0 | 0.0 | 0.0 | 5.6 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 1.5 | 4.7 | 4.8 | 3.7 | 5.3 | 5.4 | 1.7 | 0.0 | 0.0 | 7.3 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.03 | 1.00 | | 0.38 | 0.62 | | 0.18 | 0.76 | | 0.13 |
| Lane Grp Cap(c), veh/h | 101 | 385 | 403 | 191 | 480 | 473 | 560 | 0 | 0 | 543 | 0 | 0 |
| V/C Ratio(X) | 0.62 | 0.59 | 0.59 | 0.81 | 0.56 | 0.57 | 0.17 | 0.00 | 0.00 | 0.54 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 285 | 817 | 855 | 285 | 817 | 805 | 860 | 0 | 0 | 839 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 17.9 | 13.5 | 13.5 | 16.8 | 11.9 | 11.9 | 11.1 | 0.0 | 0.0 | 13.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 6.2 | 1.5 | 1.4 | 10.3 | 1.0 | 1.1 | 0.1 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 0.5 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 24.0 | 14.9 | 14.9 | 27.1 | 12.9 | 13.0 | 11.2 | 0.0 | 0.0 | 13.8 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 531 | | | 692 | | | 94 | | | 294 | |
| Approach Delay, s/veh | | 16.0 | | | 16.1 | | | 11.2 | | | 13.8 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.7 | 13.9 | | 15.5 | 7.5 | 16.2 | | 15.5 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 7.0 | 19.0 | | 19.0 | 7.0 | 19.0 | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.7 | 6.8 | | 9.3 | 3.5 | 7.4 | | 3.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.2 | | 1.2 | 0.0 | 2.5 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 15.4 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 466 | 52 | 0 | 504 | 0 | 38 |
| Future Vol, veh/h | 466 | 52 | 0 | 504 | 0 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 507 | 57 | 0 | 548 | 0 | 41 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 282 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 715 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 715 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 10.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 715 | - | - | - |
| HCM Lane V/C Ratio | 0.058 | - | - | - |
| HCM Control Delay (s) | 10.3 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 50 | 0 | 0 | 61 | 145 | 48 |
| Future Vol, veh/h | 50 | 0 | 0 | 61 | 145 | 48 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 54 | 0 | 0 | 66 | 158 | 52 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 250 | 184 | 210 | 0 | 0 |
| Stage 1 | 184 | - | - | - | - |
| Stage 2 | 66 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 739 | 858 | 1361 | - | - |
| Stage 1 | 848 | - | - | - | - |
| Stage 2 | 957 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 739 | 858 | 1361 | - | - |
| Mov Cap-2 Maneuver | 739 | - | - | - | - |
| Stage 1 | 848 | - | - | - | - |
| Stage 2 | 957 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 10.3 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1361 | - | 739 | - | - |
| HCM Lane V/C Ratio | - | - | 0.074 | - | - |
| HCM Control Delay (s) | 0 | - | 10.3 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 40 | 3 | 7 | 17 | 109 | 40 |
| Future Vol, veh/h | 40 | 3 | 7 | 17 | 109 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 43 | 3 | 8 | 18 | 118 | 43 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 174 | 140 | 161 | 0 | 0 |
| Stage 1 | 140 | - | - | - | - |
| Stage 2 | 34 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 816 | 908 | 1418 | - | - |
| Stage 1 | 887 | - | - | - | - |
| Stage 2 | 988 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 811 | 908 | 1418 | - | - |
| Mov Cap-2 Maneuver | 811 | - | - | - | - |
| Stage 1 | 882 | - | - | - | - |
| Stage 2 | 988 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|-----|-----|----|
| HCM Control Delay, s | 9.7 | 2.2 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1418 | - | 817 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.057 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 9.7 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Opening Year 2023 w/Proj
Timing Plan: PM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Traffic Volume (veh/h) | 212 | 875 | 32 | 116 | 468 | 140 | 83 | 52 | 24 | 111 | 25 | 29 |
| Future Volume (veh/h) | 212 | 875 | 32 | 116 | 468 | 140 | 83 | 52 | 24 | 111 | 25 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 226 | 931 | 34 | 123 | 498 | 149 | 88 | 55 | 26 | 118 | 27 | 31 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 276 | 1290 | 47 | 150 | 794 | 236 | 247 | 103 | 40 | 301 | 49 | 44 |
| Arrive On Green | 0.17 | 0.39 | 0.39 | 0.09 | 0.31 | 0.31 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Sat Flow, veh/h | 1594 | 3312 | 121 | 1594 | 2557 | 761 | 729 | 635 | 248 | 979 | 302 | 274 |
| Grp Volume(v), veh/h | 226 | 473 | 492 | 123 | 327 | 320 | 169 | 0 | 0 | 176 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1750 | 1594 | 1683 | 1635 | 1612 | 0 | 0 | 1555 | 0 | 0 |
| Q Serve(g_s), s | 5.8 | 10.1 | 10.1 | 3.2 | 7.0 | 7.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.8 | 10.1 | 10.1 | 3.2 | 7.0 | 7.1 | 3.8 | 0.0 | 0.0 | 4.1 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 0.47 | 0.52 | | 0.15 | 0.67 | | 0.18 |
| Lane Grp Cap(c), veh/h | 276 | 655 | 682 | 150 | 523 | 508 | 390 | 0 | 0 | 394 | 0 | 0 |
| V/C Ratio(X) | 0.82 | 0.72 | 0.72 | 0.82 | 0.63 | 0.63 | 0.43 | 0.00 | 0.00 | 0.45 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 339 | 876 | 911 | 189 | 717 | 696 | 771 | 0 | 0 | 750 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 16.8 | 11.0 | 11.0 | 18.8 | 12.5 | 12.5 | 16.5 | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 12.3 | 2.0 | 1.9 | 20.0 | 1.2 | 1.3 | 0.8 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.7 | 3.2 | 3.3 | 1.9 | 2.3 | 2.3 | 1.4 | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 29.2 | 12.9 | 12.8 | 38.8 | 13.7 | 13.8 | 17.2 | 0.0 | 0.0 | 17.3 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | D | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 1191 | | | 770 | | | 169 | | | 176 | |
| Approach Delay, s/veh | | 16.0 | | | 17.7 | | | 17.2 | | | 17.3 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.0 | 21.5 | | 11.8 | 12.3 | 18.1 | | 11.8 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 5.0 | 22.0 | | 18.0 | 9.0 | 18.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.2 | 12.1 | | 6.1 | 7.8 | 9.1 | | 5.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.4 | | 0.7 | 0.1 | 2.7 | | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 16.8 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 1079 | 49 | 0 | 583 | 0 | 36 |
| Future Vol, veh/h | 1079 | 49 | 0 | 583 | 0 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1173 | 53 | 0 | 634 | 0 | 39 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 613 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 435 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 435 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 14.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 435 | - | - | - |
| HCM Lane V/C Ratio | 0.09 | - | - | - |
| HCM Control Delay (s) | 14.1 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 50 | 0 | 0 | 132 | 135 | 45 |
| Future Vol, veh/h | 50 | 0 | 0 | 132 | 135 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 54 | 0 | 0 | 143 | 147 | 49 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 315 | 172 | 196 | 0 | 0 |
| Stage 1 | 172 | - | - | - | - |
| Stage 2 | 143 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 678 | 872 | 1377 | - | - |
| Stage 1 | 858 | - | - | - | - |
| Stage 2 | 884 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 678 | 872 | 1377 | - | - |
| Mov Cap-2 Maneuver | 678 | - | - | - | - |
| Stage 1 | 858 | - | - | - | - |
| Stage 2 | 884 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 10.8 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1377 | - | 678 | - | - |
| HCM Lane V/C Ratio | - | - | 0.08 | - | - |
| HCM Control Delay (s) | 0 | - | 10.8 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.3 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 38 | 3 | 7 | 90 | 102 | 38 |
| Future Vol, veh/h | 38 | 3 | 7 | 90 | 102 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 41 | 3 | 8 | 98 | 111 | 41 |

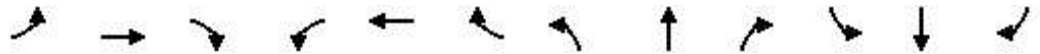
| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 246 | 132 | 152 | 0 | 0 |
| Stage 1 | 132 | - | - | - | - |
| Stage 2 | 114 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 742 | 917 | 1429 | - | - |
| Stage 1 | 894 | - | - | - | - |
| Stage 2 | 911 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 738 | 917 | 1429 | - | - |
| Mov Cap-2 Maneuver | 738 | - | - | - | - |
| Stage 1 | 889 | - | - | - | - |
| Stage 2 | 911 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 10.1 | 0.5 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1429 | - | 749 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.059 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 10.1 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Horizon Year 2040
Timing Plan: AM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 80 | 548 | 11 | 126 | 581 | 129 | 12 | 5 | 11 | 283 | 19 | 48 |
| Future Volume (veh/h) | 80 | 548 | 11 | 126 | 581 | 129 | 12 | 5 | 11 | 283 | 19 | 48 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 84 | 577 | 12 | 133 | 612 | 136 | 13 | 5 | 12 | 298 | 20 | 51 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 112 | 908 | 19 | 164 | 826 | 183 | 284 | 121 | 198 | 485 | 23 | 60 |
| Arrive On Green | 0.07 | 0.27 | 0.27 | 0.10 | 0.30 | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1594 | 3373 | 70 | 1594 | 2739 | 607 | 563 | 388 | 633 | 1112 | 75 | 190 |
| Grp Volume(v), veh/h | 84 | 288 | 301 | 133 | 376 | 372 | 30 | 0 | 0 | 369 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1759 | 1594 | 1683 | 1663 | 1584 | 0 | 0 | 1377 | 0 | 0 |
| Q Serve(g_s), s | 2.5 | 7.2 | 7.2 | 3.9 | 9.6 | 9.6 | 0.0 | 0.0 | 0.0 | 11.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 2.5 | 7.2 | 7.2 | 3.9 | 9.6 | 9.6 | 0.6 | 0.0 | 0.0 | 11.9 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.37 | 0.43 | | 0.40 | 0.81 | | 0.14 |
| Lane Grp Cap(c), veh/h | 112 | 453 | 474 | 164 | 508 | 502 | 604 | 0 | 0 | 568 | 0 | 0 |
| V/C Ratio(X) | 0.75 | 0.64 | 0.64 | 0.81 | 0.74 | 0.74 | 0.05 | 0.00 | 0.00 | 0.65 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 234 | 671 | 701 | 234 | 671 | 663 | 725 | 0 | 0 | 684 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 21.7 | 15.4 | 15.4 | 20.9 | 15.0 | 15.0 | 11.4 | 0.0 | 0.0 | 15.3 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 9.5 | 1.5 | 1.4 | 13.1 | 3.0 | 3.1 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.1 | 2.5 | 2.7 | 1.9 | 3.5 | 3.5 | 0.2 | 0.0 | 0.0 | 3.4 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.3 | 16.8 | 16.8 | 34.1 | 18.0 | 18.1 | 11.5 | 0.0 | 0.0 | 16.9 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | C | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 673 | | | 881 | | | 30 | | | 369 | |
| Approach Delay, s/veh | | 18.6 | | | 20.5 | | | 11.5 | | | 16.9 | |
| Approach LOS | | B | | | C | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.9 | 17.8 | | 19.9 | 8.4 | 19.4 | | 19.9 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 7.0 | 19.0 | | 19.0 | 7.0 | 19.0 | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.9 | 9.2 | | 13.9 | 4.5 | 11.6 | | 2.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.5 | | 1.0 | 0.0 | 2.8 | | 0.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 19.0 | | | | | | | | |
| HCM 6th LOS | | | | B | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Horizon Year 2040
Timing Plan: PM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 283 | 1132 | 42 | 90 | 624 | 186 | 52 | 52 | 22 | 148 | 15 | 38 |
| Future Volume (veh/h) | 283 | 1132 | 42 | 90 | 624 | 186 | 52 | 52 | 22 | 148 | 15 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 301 | 1204 | 45 | 96 | 664 | 198 | 55 | 55 | 23 | 157 | 16 | 40 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 292 | 1427 | 53 | 118 | 823 | 245 | 197 | 166 | 54 | 323 | 29 | 52 |
| Arrive On Green | 0.18 | 0.43 | 0.43 | 0.07 | 0.32 | 0.32 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Sat Flow, veh/h | 1594 | 3309 | 124 | 1594 | 2556 | 762 | 491 | 878 | 286 | 1034 | 153 | 274 |
| Grp Volume(v), veh/h | 301 | 612 | 637 | 96 | 437 | 425 | 133 | 0 | 0 | 213 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1750 | 1594 | 1683 | 1635 | 1656 | 0 | 0 | 1461 | 0 | 0 |
| Q Serve(g_s), s | 9.0 | 16.0 | 16.0 | 2.9 | 11.7 | 11.7 | 0.0 | 0.0 | 0.0 | 3.2 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 9.0 | 16.0 | 16.0 | 2.9 | 11.7 | 11.7 | 3.3 | 0.0 | 0.0 | 6.5 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 0.47 | 0.41 | | 0.17 | 0.74 | | 0.19 |
| Lane Grp Cap(c), veh/h | 292 | 726 | 754 | 118 | 542 | 527 | 417 | 0 | 0 | 404 | 0 | 0 |
| V/C Ratio(X) | 1.03 | 0.84 | 0.84 | 0.81 | 0.81 | 0.81 | 0.32 | 0.00 | 0.00 | 0.53 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 292 | 754 | 784 | 162 | 617 | 599 | 681 | 0 | 0 | 638 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 20.0 | 12.5 | 12.5 | 22.4 | 15.2 | 15.2 | 17.5 | 0.0 | 0.0 | 18.6 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 60.7 | 8.4 | 8.2 | 19.1 | 6.9 | 7.2 | 0.4 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.9 | 6.4 | 6.6 | 1.6 | 4.8 | 4.7 | 1.2 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 80.7 | 20.9 | 20.7 | 41.4 | 22.2 | 22.4 | 17.9 | 0.0 | 0.0 | 19.6 | 0.0 | 0.0 |
| LnGrp LOS | F | C | C | D | C | C | B | A | A | B | A | A |
| Approach Vol, veh/h | | 1550 | | | 958 | | | 133 | | | | 213 |
| Approach Delay, s/veh | | 32.4 | | | 24.2 | | | 17.9 | | | | 19.6 |
| Approach LOS | | C | | | C | | | B | | | | B |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.6 | 26.2 | | 14.3 | 14.0 | 20.8 | | 14.3 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 5.0 | 22.0 | | 18.0 | 9.0 | 18.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.9 | 18.0 | | 8.5 | 11.0 | 13.7 | | 5.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.7 | | 0.8 | 0.0 | 2.1 | | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 28.0 | | | | | | | | |
| HCM 6th LOS | | | | C | | | | | | | | |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Horizon Year 2040 w/Proj
Timing Plan: AM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 80 | 559 | 11 | 178 | 553 | 129 | 58 | 19 | 19 | 283 | 36 | 48 |
| Future Volume (veh/h) | 80 | 559 | 11 | 178 | 553 | 129 | 58 | 19 | 19 | 283 | 36 | 48 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 84 | 588 | 12 | 187 | 582 | 136 | 61 | 20 | 20 | 298 | 38 | 51 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 109 | 835 | 17 | 222 | 862 | 201 | 373 | 121 | 94 | 468 | 43 | 58 |
| Arrive On Green | 0.07 | 0.25 | 0.25 | 0.14 | 0.32 | 0.32 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1594 | 3374 | 69 | 1594 | 2710 | 632 | 821 | 383 | 297 | 1083 | 138 | 185 |
| Grp Volume(v), veh/h | 84 | 293 | 307 | 187 | 361 | 357 | 101 | 0 | 0 | 387 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1760 | 1594 | 1683 | 1658 | 1501 | 0 | 0 | 1406 | 0 | 0 |
| Q Serve(g_s), s | 2.6 | 8.0 | 8.0 | 5.8 | 9.4 | 9.4 | 0.0 | 0.0 | 0.0 | 10.7 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 2.6 | 8.0 | 8.0 | 5.8 | 9.4 | 9.4 | 2.3 | 0.0 | 0.0 | 12.9 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.38 | 0.60 | | 0.20 | 0.77 | | 0.13 |
| Lane Grp Cap(c), veh/h | 109 | 417 | 435 | 222 | 535 | 527 | 587 | 0 | 0 | 570 | 0 | 0 |
| V/C Ratio(X) | 0.77 | 0.70 | 0.70 | 0.84 | 0.67 | 0.68 | 0.17 | 0.00 | 0.00 | 0.68 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 222 | 636 | 665 | 222 | 636 | 627 | 674 | 0 | 0 | 655 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 23.0 | 17.2 | 17.2 | 21.1 | 14.9 | 14.9 | 12.6 | 0.0 | 0.0 | 16.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 10.6 | 2.2 | 2.1 | 24.3 | 2.2 | 2.3 | 0.1 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.2 | 3.0 | 3.1 | 3.4 | 3.4 | 3.4 | 0.7 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 33.6 | 19.4 | 19.3 | 45.4 | 17.1 | 17.2 | 12.7 | 0.0 | 0.0 | 18.4 | 0.0 | 0.0 |
| LnGrp LOS | C | B | B | D | B | B | B | A | A | B | A | A |
| Approach Vol, veh/h | | 684 | | | 905 | | | 101 | | | 387 | |
| Approach Delay, s/veh | | 21.1 | | | 23.0 | | | 12.7 | | | 18.4 | |
| Approach LOS | | C | | | C | | | B | | | B | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.0 | 17.4 | | 20.8 | 8.5 | 21.0 | | 20.8 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 7.0 | 19.0 | | 19.0 | 7.0 | 19.0 | | 19.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.8 | 10.0 | | 14.9 | 4.6 | 11.4 | | 4.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.4 | | 0.9 | 0.0 | 2.7 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 21.0 | | | | | | | | |
| HCM 6th LOS | | | | C | | | | | | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 611 | 52 | 0 | 660 | 0 | 38 |
| Future Vol, veh/h | 611 | 52 | 0 | 660 | 0 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 664 | 57 | 0 | 717 | 0 | 41 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 361 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 636 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 636 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 636 | - | - | - |
| HCM Lane V/C Ratio | 0.065 | - | - | - |
| HCM Control Delay (s) | 11.1 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 50 | 0 | 0 | 69 | 184 | 48 |
| Future Vol, veh/h | 50 | 0 | 0 | 69 | 184 | 48 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 54 | 0 | 0 | 75 | 200 | 52 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 301 | 226 | 252 | 0 | 0 |
| Stage 1 | 226 | - | - | - | - |
| Stage 2 | 75 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 691 | 813 | 1313 | - | - |
| Stage 1 | 812 | - | - | - | - |
| Stage 2 | 948 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 691 | 813 | 1313 | - | - |
| Mov Cap-2 Maneuver | 691 | - | - | - | - |
| Stage 1 | 812 | - | - | - | - |
| Stage 2 | 948 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 10.7 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1313 | - | 691 | - | - |
| HCM Lane V/C Ratio | - | - | 0.079 | - | - |
| HCM Control Delay (s) | 0 | - | 10.7 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.3 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 40 | 3 | 7 | 25 | 148 | 40 |
| Future Vol, veh/h | 40 | 3 | 7 | 25 | 148 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 43 | 3 | 8 | 27 | 161 | 43 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 226 | 183 | 204 | 0 | 0 |
| Stage 1 | 183 | - | - | - | - |
| Stage 2 | 43 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 762 | 859 | 1368 | - | - |
| Stage 1 | 848 | - | - | - | - |
| Stage 2 | 979 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 757 | 859 | 1368 | - | - |
| Mov Cap-2 Maneuver | 757 | - | - | - | - |
| Stage 1 | 843 | - | - | - | - |
| Stage 2 | 979 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 10 | 1.7 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1368 | - | 763 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | 0.061 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 10 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

Saber Hotel and Gas Station
1: Linden Ave & Valley Blvd

Horizon Year 2040 w/Proj
Timing Plan: PM PEAK



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 283 | 1142 | 42 | 139 | 595 | 186 | 96 | 65 | 30 | 148 | 29 | 38 |
| Future Volume (veh/h) | 283 | 1142 | 42 | 139 | 595 | 186 | 96 | 65 | 30 | 148 | 29 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1673 | 1772 | 1772 | 1673 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 | 1772 |
| Adj Flow Rate, veh/h | 301 | 1215 | 45 | 148 | 633 | 198 | 102 | 69 | 32 | 157 | 31 | 40 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 277 | 1363 | 50 | 154 | 845 | 264 | 237 | 132 | 50 | 304 | 50 | 50 |
| Arrive On Green | 0.17 | 0.41 | 0.41 | 0.10 | 0.33 | 0.33 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Sat Flow, veh/h | 1594 | 3311 | 123 | 1594 | 2525 | 789 | 657 | 654 | 245 | 920 | 249 | 249 |
| Grp Volume(v), veh/h | 301 | 617 | 643 | 148 | 422 | 409 | 203 | 0 | 0 | 228 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1594 | 1683 | 1750 | 1594 | 1683 | 1630 | 1556 | 0 | 0 | 1417 | 0 | 0 |
| Q Serve(g_s), s | 9.0 | 17.7 | 17.7 | 4.8 | 11.5 | 11.6 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 9.0 | 17.7 | 17.7 | 4.8 | 11.5 | 11.6 | 6.0 | 0.0 | 0.0 | 7.7 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 0.48 | 0.50 | | 0.16 | 0.69 | | 0.18 |
| Lane Grp Cap(c), veh/h | 277 | 693 | 720 | 154 | 563 | 545 | 420 | 0 | 0 | 404 | 0 | 0 |
| V/C Ratio(X) | 1.09 | 0.89 | 0.89 | 0.96 | 0.75 | 0.75 | 0.48 | 0.00 | 0.00 | 0.56 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 277 | 714 | 742 | 154 | 584 | 566 | 627 | 0 | 0 | 596 | 0 | 0 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 21.4 | 14.2 | 14.2 | 23.3 | 15.3 | 15.3 | 18.8 | 0.0 | 0.0 | 19.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 79.7 | 13.2 | 12.9 | 61.4 | 5.1 | 5.4 | 0.9 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.1 | 8.0 | 8.3 | 4.3 | 4.6 | 4.5 | 2.1 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 101.2 | 27.3 | 27.0 | 84.7 | 20.5 | 20.7 | 19.7 | 0.0 | 0.0 | 20.7 | 0.0 | 0.0 |
| LnGrp LOS | F | C | C | F | C | C | B | A | A | C | A | A |
| Approach Vol, veh/h | | 1561 | | | 979 | | | 203 | | | 228 | |
| Approach Delay, s/veh | | 41.5 | | | 30.3 | | | 19.7 | | | 20.7 | |
| Approach LOS | | D | | | C | | | B | | | C | |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.0 | 26.4 | | 15.5 | 14.0 | 22.4 | | 15.5 | | | | |
| Change Period (Y+Rc), s | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 5.0 | 22.0 | | 18.0 | 9.0 | 18.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.8 | 19.7 | | 9.7 | 11.0 | 13.6 | | 8.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.6 | | 0.8 | 0.0 | 2.1 | | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 34.7 | | | | | | | | |
| HCM 6th LOS | | | | C | | | | | | | | |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 1428 | 49 | 0 | 732 | 0 | 36 |
| Future Vol, veh/h | 1428 | 49 | 0 | 732 | 0 | 36 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1552 | 53 | 0 | 796 | 0 | 39 |

| Major/Minor | Major1 | Major2 | Minor1 | | | |
|----------------------|--------|--------|--------|---|---|------|
| Conflicting Flow All | 0 | 0 | - | - | - | 803 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | - | 0 | - | 0 | 326 |
| Stage 1 | - | - | 0 | - | 0 | - |
| Stage 2 | - | - | 0 | - | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | - | - | 326 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 17.5 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 326 | - | - | - |
| HCM Lane V/C Ratio | 0.12 | - | - | - |
| HCM Control Delay (s) | 17.5 | - | - | - |
| HCM Lane LOS | C | - | - | - |
| HCM 95th %tile Q(veh) | 0.4 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.3 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | WT | | | WT | WT | |
| Traffic Vol, veh/h | 50 | 0 | 0 | 163 | 172 | 45 |
| Future Vol, veh/h | 50 | 0 | 0 | 163 | 172 | 45 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 54 | 0 | 0 | 177 | 187 | 49 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 389 | 212 | 236 | 0 | 0 |
| Stage 1 | 212 | - | - | - | - |
| Stage 2 | 177 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 615 | 828 | 1331 | - | - |
| Stage 1 | 823 | - | - | - | - |
| Stage 2 | 854 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 615 | 828 | 1331 | - | - |
| Mov Cap-2 Maneuver | 615 | - | - | - | - |
| Stage 1 | 823 | - | - | - | - |
| Stage 2 | 854 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.4 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h) | 1331 | - | 615 | - | - |
| HCM Lane V/C Ratio | - | - | 0.088 | - | - |
| HCM Control Delay (s) | 0 | - | 11.4 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.3 | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 38 | 3 | 7 | 121 | 139 | 38 |
| Future Vol, veh/h | 38 | 3 | 7 | 121 | 139 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 41 | 3 | 8 | 132 | 151 | 41 |

| Major/Minor | Minor2 | Major1 | | Major2 | |
|----------------------|--------|--------|-------|--------|---|
| Conflicting Flow All | 320 | 172 | 192 | 0 | 0 |
| Stage 1 | 172 | - | - | - | - |
| Stage 2 | 148 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - |
| Pot Cap-1 Maneuver | 673 | 872 | 1381 | - | - |
| Stage 1 | 858 | - | - | - | - |
| Stage 2 | 880 | - | - | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | 669 | 872 | 1381 | - | - |
| Mov Cap-2 Maneuver | 669 | - | - | - | - |
| Stage 1 | 853 | - | - | - | - |
| Stage 2 | 880 | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 10.7 | 0.4 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 1381 | - | 681 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | 0.065 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 10.7 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

Appendix E

Internal Capture Worksheets

| | |
|-------------------------|-----------------------------|
| Project Name: | Saber Hotel and Gas Station |
| Analysis Period: | AM Street Peak Hour |

| Land Use | Table 7-A (D): Entering Trips | | | Table 7-A (O): Exiting Trips | | |
|----------------------|-------------------------------|---------------|---------------|------------------------------|---------------|---------------|
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 68 | 68 | 1.00 | 68 | 68 |
| Restaurant | 1.00 | 58 | 58 | 1.00 | 54 | 54 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 23 | 23 | 1.00 | 18 | 18 |

| Origin (From) | Destination (To) | | | | | |
|----------------------|------------------|--------|------------|----------------------|-------------|-------|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 20 | | 9 | 0 | 10 | 0 |
| Restaurant | 17 | 8 | | 0 | 2 | 2 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 14 | 3 | 2 | 0 | 0 | |

| Origin (From) | Destination (To) | | | | | |
|----------------------|------------------|--------|------------|----------------------|-------------|-------|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 22 | 13 | 0 | 0 | 0 |
| Retail | 0 | | 29 | 0 | 0 | 0 |
| Restaurant | 0 | 5 | | 0 | 0 | 1 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 12 | 12 | 0 | | 0 |
| Hotel | 0 | 3 | 3 | 0 | 0 | |

| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|----------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| | Internal | External | Total | Vehicles ¹ | Transit ² | Non-Motorized ² |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 8 | 60 | 68 | 60 | 0 | 0 |
| Restaurant | 11 | 47 | 58 | 47 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 1 | 22 | 23 | 22 | 0 | 0 |
| All Other Land Uses ³ | 0 | 0 | 0 | 0 | 0 | 0 |

| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
|----------------------------------|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| | Internal | External | Total | Vehicles ¹ | Transit ² | Non-Motorized ² |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 9 | 59 | 68 | 59 | 0 | 0 |
| Restaurant | 6 | 48 | 54 | 48 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 5 | 13 | 18 | 13 | 0 | 0 |
| All Other Land Uses ³ | 0 | 0 | 0 | 0 | 0 | 0 |

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

| NCHRP 684 Internal Trip Capture Estimation Tool | | | |
|---|-----------------------------|---------------|----------------|
| Project Name: | Saber Hotel and Gas Station | Organization: | Mizuta Traffic |
| Project Location: | Bloomington, CA | Performed By: | MTC |
| Scenario Description: | n/a | Date: | 19-May |
| Analysis Year: | n/a | Checked By: | MTC |
| Analysis Period: | PM Street Peak Hour | Date: | 19-May |

| Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate) | | | | | | |
|--|---|----------|-------|--------------------------------------|----------|---------|
| Land Use | Development Data (For Information Only) | | | Estimated Vehicle-Trips ³ | | |
| | ITE LUCs ¹ | Quantity | Units | Total | Entering | Exiting |
| Office | | | | 0 | | |
| Retail | | | | 131 | 66 | 65 |
| Restaurant | | | | 83 | 44 | 39 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | | | | 0 | | |
| Hotel | | | | 52 | 27 | 25 |
| All Other Land Uses ² | | | | 0 | | |
| | | | | 266 | 137 | 129 |

| Table 2-P: Mode Split and Vehicle Occupancy Estimates | | | | | | |
|---|------------------------|-----------|-----------------|------------------------|-----------|-----------------|
| Land Use | Entering Trips | | | Exiting Trips | | |
| | Veh. Occ. ⁴ | % Transit | % Non-Motorized | Veh. Occ. ⁴ | % Transit | % Non-Motorized |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |
| All Other Land Uses ² | | | | | | |

| Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance) | | | | | | |
|---|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From) | Destination (To) | | | | | |
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

| Table 4-P: Internal Person-Trip Origin-Destination Matrix* | | | | | | |
|--|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From) | Destination (To) | | | | | |
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 0 | | 13 | 0 | 0 | 3 |
| Restaurant | 0 | 16 | | 0 | 0 | 3 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 1 | 2 | 0 | 0 | |

| Table 5-P: Computations Summary | | | |
|---|-------|----------|---------|
| | Total | Entering | Exiting |
| All Person-Trips | 266 | 137 | 129 |
| Internal Capture Percentage | 29% | 28% | 29% |
| External Vehicle-Trips ⁵ | 190 | 99 | 91 |
| External Transit-Trips ⁶ | 0 | 0 | 0 |
| External Non-Motorized Trips ⁶ | 0 | 0 | 0 |

| Table 6-P: Internal Trip Capture Percentages by Land Use | | |
|--|----------------|---------------|
| Land Use | Entering Trips | Exiting Trips |
| Office | N/A | N/A |
| Retail | 26% | 25% |
| Restaurant | 34% | 49% |
| Cinema/Entertainment | N/A | N/A |
| Residential | N/A | N/A |
| Hotel | 22% | 12% |

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

| | |
|-------------------------|-----------------------------|
| Project Name: | Saber Hotel and Gas Station |
| Analysis Period: | PM Street Peak Hour |

| Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends | | | | | | |
|--|-------------------------------|---------------|---------------|------------------------------|---------------|---------------|
| Land Use | Table 7-P (D): Entering Trips | | | Table 7-P (O): Exiting Trips | | |
| | Veh. Occ. | Vehicle-Trips | Person-Trips* | Veh. Occ. | Vehicle-Trips | Person-Trips* |
| Office | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Retail | 1.00 | 66 | 66 | 1.00 | 65 | 65 |
| Restaurant | 1.00 | 44 | 44 | 1.00 | 39 | 39 |
| Cinema/Entertainment | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Residential | 1.00 | 0 | 0 | 1.00 | 0 | 0 |
| Hotel | 1.00 | 27 | 27 | 1.00 | 25 | 25 |

| Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin) | | | | | | |
|--|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From) | Destination (To) | | | | | |
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 0 | 0 | 0 | 0 |
| Retail | 1 | | 19 | 3 | 17 | 3 |
| Restaurant | 1 | 16 | | 3 | 7 | 3 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | | 0 |
| Hotel | 0 | 4 | 17 | 0 | 1 | |

| Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination) | | | | | | |
|---|------------------|--------|------------|----------------------|-------------|-------|
| Origin (From) | Destination (To) | | | | | |
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 5 | 1 | 0 | 0 | 0 |
| Retail | 0 | | 13 | 0 | 0 | 5 |
| Restaurant | 0 | 33 | | 0 | 0 | 19 |
| Cinema/Entertainment | 0 | 3 | 1 | | 0 | 0 |
| Residential | 0 | 7 | 6 | 0 | | 3 |
| Hotel | 0 | 1 | 2 | 0 | 0 | |

| Table 9-P (D): Internal and External Trips Summary (Entering Trips) | | | | | | |
|---|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Destination Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
| | Internal | External | Total | Vehicles ¹ | Transit ² | Non-Motorized ² |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 17 | 49 | 66 | 49 | 0 | 0 |
| Restaurant | 15 | 29 | 44 | 29 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 6 | 21 | 27 | 21 | 0 | 0 |
| All Other Land Uses ³ | 0 | 0 | 0 | 0 | 0 | 0 |

| Table 9-P (O): Internal and External Trips Summary (Exiting Trips) | | | | | | |
|--|-----------------------|----------|-------|-------------------------|----------------------|----------------------------|
| Origin Land Use | Person-Trip Estimates | | | External Trips by Mode* | | |
| | Internal | External | Total | Vehicles ¹ | Transit ² | Non-Motorized ² |
| Office | 0 | 0 | 0 | 0 | 0 | 0 |
| Retail | 16 | 49 | 65 | 49 | 0 | 0 |
| Restaurant | 19 | 20 | 39 | 20 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| Hotel | 3 | 22 | 25 | 22 | 0 | 0 |
| All Other Land Uses ³ | 0 | 0 | 0 | 0 | 0 | 0 |

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Appendix F

Cumulative Project Excerpts



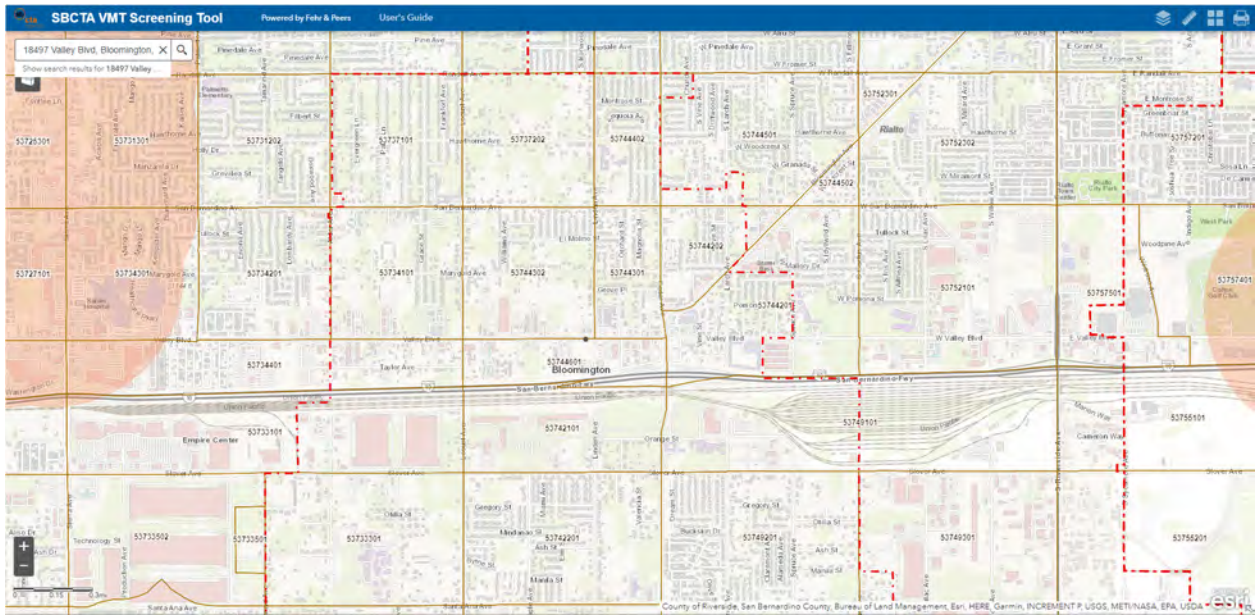
| APN | RECORD ID | STATUS | DESCRIPTION |
|-----------|-----------------|-------------------|---|
| 025215120 | PROJ-2020-00160 | Accepted | MINOR USE PERMIT TO ESTABLISH A MAJOR AUTOMOTIVE REPAIR AND SERVICE BUSINESS TO INCLUDE TRUCK MAINTENANCE ON 0.42 ACRES |
| 25205176 | PROJ-2020-00036 | Approved | Multi-family Housing Project - Bloomington Housing III. |
| 025213150 | PROJ-2020-00209 | Approved | A CONDITIONAL USE PERMIT TO CONSTRUCT AND OPERATE A 174,780 SQUARE FOOT LOGISTICS WAREHOUSE AND OFFICE WITH ASSOCIATED PARKING, IN C A 14'3" FRONT YARD SETACK (INSTEAD OF 25' FEET) ON FIVE SEPARATE LOTS AT 10380 ALDER AVENUE IN THE BLOOMINGTON, REGIONAL INDUSTRIAL (BL/IR |
| 025307232 | PRAA-2020-00001 | Approved | Revision to an Approved Action to add a self service automated car wash and a five hundred (500) square foot enclosed utility room to an existing gas station |
| 025701312 | PROJ-2020-00138 | Approved | Boulevard, within the VC/COM (Valley Corridor Specific Plan/Commercial) zoning district; Assessor Parcel Number: 0253-072-32. Project Number: PRAA-2020 |
| 025703112 | PROJ-2020-00035 | Approved | Minor Use Permit (MUP) to construct a Chevron Service Fueling Station and 5,812 square foot convenience store with a quick service restaurant on the north |
| 025708101 | PROJ-2020-00003 | Approved | Avenue in Bloomington on property zoned Bloomington Community Plan/General Commercial/Sign Control Primary; BL/CG)-SCP; APN# 0257-013-12. and Mi |
| 25710101 | PRAA-2021-00041 | Approved | CF- GENERAL PLAN AMENDMENT TO CHANGE THE ZONING FORM CG TO CS - CONDITIONAL USE PERMIT FOR 321 TRUCK STORAGE YARD WITH 2400 SQ. FT. I |
| 025710101 | PROJ-2019-00079 | Approved | MINOR USE PERMIT - TO CONSTRUCT A 5,200-SQUARE FOOT CONVENIENCE STORE WITH 10 FUEL PUMPS AND A 1,477-SQURAE FOOT CAR WASH, ON A 2.03 |
| 025710109 | PROJ-2020-00041 | Approved | Minor Revision to make minor adjustments to the approved site plan (PROJ-2019-00079). Includes two options: Option A - reduce number of truck parking sp |
| 025901322 | PROJ-2020-00122 | Approved | underground/expand landscape buffer on east side of property to 20 feet/increase CMU wall on east property line to 8 feet. Option B - Same as Option A wit |
| 025916137 | PRAA-2020-00014 | Approved | A CONDITIONAL USE PERMIT (CUP) AND TENTATIVE PARCEL MAP (TPM) FOR A COMMERCIAL/RETAIL CENTER TO INCLUDE A 7 PUMP TRUCK FUELING CANOP |
| 26001101 | PROJ-2020-00148 | Approved | CONVENIENCE STORE, A 3,000 SQUARE FOOT QUICK SERVICE DRIVE-THRU RESTAURANT AND A 2,800 SQUARE FOOT QUICK SERVICE DRIVE THRU RESTAURAI |
| 025307232 | PRAA-2021-00048 | Decision Pending | TENTATIVE PARCEL MAP IS INCLUDED TO SUBDIVIDE THE CURRENT 8.9 ACRE PARCEL INTO 4 PARCELS. APN: 0257-101-01; PROJECT NUMBER: PROJ-2019-000 |
| 025603115 | PRAA-2020-00011 | Decision Rendered | CONDITIONAL USE PERMIT FOR A PROPOSED 5,000 SQUARE-FOOT CONVENIENCE STORE AND SERVICE STATION WITH FOUR FUELING ISLANDS AND A 4,370 S |
| 025721101 | PROJ-2021-00026 | Decision Rendered | 2,550 SQUARE FOOT DRIVE-THROUGH RESTAURANT AND A 2,244 SQUARE FOOT STORAGE BUILDING, IN CONJUNCTION WITH A GENERAL PLAN AMENDMEN |
| 025721101 | PROJ-2020-00166 | Decision Rendered | BLOOMINGTON/SINGLE RESIDENTIAL, ONE ACRE, ADDITIONAL AGRICULTURE (BL/RS-1-AA) TO BLOOMINGTON GENERAL COMMERCIAL (BL/CG) IN THE COMI |
| 025721102 | PROJ-2021-00026 | Decision Rendered | MINOR USE PERMIT FOR THE CONSTRUCTION OF A 1,625-SQUARE FOOT FOOD TAKE-AWAY FACILITY ON CEDAR AVENUE IN THE BLOOMINGTON PLANNING |
| 025721102 | PROJ-2020-00166 | Decision Rendered | A REVISION TO AN APPROVED ACTION TO ALLOW A 2,540 SQUARE FOOT EXPANSION OF THE SAINT CHARLES BOROMEO CHURCH SOCIAL HALL AT 11342 SPR |
| 025721103 | PROJ-2021-00026 | Decision Rendered | CF: Conditional Use Permit: Proposed truck terminal that will include an office building, fencing, and landscaped areas around the property. |
| 025722101 | PROJ-2021-00026 | Decision Rendered | MINOR REVISION TO AN APPROVED ACTION TO REPLACE THREE (3) EXISTING PARALLEL PARKING SPACES WITH SIX (6) PERPENDICULAR PARKING SPACES SPE |
| 025722101 | PROJ-2020-00166 | Decision Rendered | AN APPROVED AUTOMATED CAR WASH (PRAA-2020-00001) AT AN EXISTING GAS STATION/MINI-MART ON A .96 ACRE PARCEL LOCATED AT 18762 VALLEY BL |
| 024915130 | PROJ-2022-00031 | Filed | MAJOR REVISION TO APPROVED ACTION - PROPOSED TO CONVERT AN EXISTING 2630 SQ. FT. CARETAKER QUARTERS INTO A 2,523 SQ. FT. RESTAURANT AND |
| 025204138 | PROJ-2021-00175 | Filed | Tentative Parcel Map subdividing 3.62 acres into 5 parcels, to accommodate a gas station with a convenience store, and 4 restaurants with a drive-thru. See |
| 025213144 | PROJ-2020-00179 | Filed | CONDITIONAL USE PERMIT - PROPOSED CONVENIENCE STORE WITH 12-PUMP GAS SERVICE STATION, DRIVE THRU CAR-WASH AND FOUR(4) OTHER DRIVE TH |
| 025214205 | PROJ-2022-00051 | Filed | Tentative Parcel Map subdividing 3.62 acres into 5 parcels, to accommodate a gas station with a convenience store, and 4 restaurants with a drive-thru. See |
| 025214206 | PROJ-2022-00051 | Filed | CONDITIONAL USE PERMIT - PROPOSED CONVENIENCE STORE WITH 12-PUMP GAS SERVICE STATION, DRIVE THRU CAR-WASH AND FOUR(4) OTHER DRIVE TH |
| 025214248 | PROJ-2021-00071 | Filed | Tentative Parcel Map subdividing 3.62 acres into 5 parcels, to accommodate a gas station with a convenience store, and 4 restaurants with a drive-thru. See |
| 025312341 | PROJ-2021-00028 | Filed | Tentative Parcel Map subdividing 3.62 acres into 5 parcels, to accommodate a gas station with a convenience store, and 4 restaurants with a drive-thru. See |
| 025709105 | PRAA-2022-00018 | Filed | PROJ-2022-00031- MINOR USE PERMIT (MUP) TO CONSTRUCT A NEW WIRELESS TELECOMMUNICATIONS FACILITY CONSISTING OF A 68 FOOT HIGH FAUX MI |
| 025710101 | PRAA-2021-00039 | Filed | MINOR USE PERMIT -LOT MERGER AND MAJOR REASONABLE ACCOMODATION - Renovation of an existing 98-bed assisted living and 18-bed congregate hou |
| | | | care facility and 36 affordable housing units for senior and disabled residents. Adult day care with capacity of 200. (CONCURRENT FILING PMRG-2022-00001 |
| | | | RESIDENTIAL CARE FACILITY, 18 BED CONGREGATE HOUSING FACILITY, ADULT DAY HEALTH CARE CENTER (CAPACITY OF 220 PERSONS) ON FOUR (4) PARCELS |
| | | | AVENUE; WITHIN THE COUNTYWIDE PLAN DESIGNATION MEDIUM DENSITY RESIDENTIAL AND LOW DENSITY RESIDENTIAL (MDR/LDR), SINGLE RESIDENTIAL Z |
| | | | A MINOR USE PERMIT TO ESTABLISH A TRUCK TERMINAL BUSINESS, LOCATED AT 17680 SLOVER AVE, BLOOMINGTON, CA; BLOOMINGTON COMMUNITY PLA |
| | | | SUPERVISORIAL DISTRICT; APN(S): 0252-131-44 AND 0252-131-09; PROJECT NUMBER: P2019000232 |
| | | | New 8 Units Commercial Retail Center, approximately 54,880 sq. ft. building on 2 parcels |
| | | | New 8 Units Commercial Retail Center, approximately 54,880 sq. ft. building on 2 parcels |
| | | | CONDITIONAL USE PERMIT - TRUCK REPAIR - PRAA-2019-00041 |
| | | | P201800312/ CUP - Pacheco Used Car Lot - PERMITS PLUS |
| | | | MAJOR REVISION TO AN APPROVED ACTION FOR THE CONSTRUCTION OF A 12,129 SQUARE FOOT FELLOWSHIP HALL AND CLASSROOMS TO AN EXISTING CHI |
| | | | ACRE PARCEL; LOCATED AT 11100 CEDAR AVENUE, BLOOMINGTON; WITHIN THE COUNTYWIDE PLAN DESIGNATION MEDIUM DENSITY RESIDENTIAL/SINGLE |
| | | | AGRICULTURE OVERLAY ZONING DISTRICT (MDR/RS-1-AA) WITHIN THE CITY OF RIALTO SPHERE OF INFLUENCE AREA; APN: 0257-091-05; PROJECT NO.: PRAA |
| | | | A Revision to an Approved Action (PROJ-2019-00079) to add a 5,000 sf restaurant building to the site |

| | | | |
|-----------|-----------------|-----------|---|
| 025904301 | PROJ-2022-00058 | Filed | CONDITIONAL USE PERMIT - A proposal for a distribution / Warehouse Building located on the Northeast corner of Ninth and Cedar in Bloomington, in the City of Bloomington, in the amount of 10,000 square feet of operable space. Current zoning is General Commercial (CG-SCp). The Site is 4.1-acre and is currently vacant. Ninety-Six (96) parking stalls are required. CF- MINOR USE PERMIT AND GENERAL PLAN AMENDMENT - PROPOSED TRUCKING FACILITY. |
| 026001125 | PROJ-2021-00021 | Filed | |
| 025210136 | PROJ-2021-00113 | In Review | RDS Logistics Group ("Applicant") recently acquired an approximately 5.89-acre parcel that is located at 18434 Valley Boulevard, approximately 300 feet west of San Bernardino, community of Bloomington ("Site"). The Applicant wishes to develop the Site with a 32,400 square foot building that will consist of approximately 10,000 square feet of office space and a total of 4,800 square feet of office situated on the first and second floors of the warehouse building ("Project"). The purpose of this application is to obtain a MAJOR REVISION TO APPROVED ACTION |
| 025214178 | PRAA-2020-00034 | In Review | |
| 025216143 | PROJ-2022-00014 | In Review | CONDITIONAL USE PERMIT - Proposal includes 1) an 11,877 sf., 5-story hotel/80-room, 2) a gas station with a 2,400 sf. convenience store and a 3,192 sf. canopy |
| 025216145 | PROJ-2022-00014 | In Review | CONDITIONAL USE PERMIT - Proposal includes 1) an 11,877 sf., 5-story hotel/80-room, 2) a gas station with a 2,400 sf. convenience store and a 3,192 sf. canopy |
| 025312121 | PROJ-2020-00214 | In Review | MINOR USE PERMIT TO ESTABLISH AN OFFICE RETAIL USE ON 0.22 ACRE, IN THE COMMUNITY OF BLOOMINGTON; FIFTH SUPERVISORIAL DISTRICT; APN: 025 |
| 025312141 | PROJ-2020-00214 | In Review | MINOR USE PERMIT TO ESTABLISH AN OFFICE RETAIL USE ON 0.22 ACRE, IN THE COMMUNITY OF BLOOMINGTON; FIFTH SUPERVISORIAL DISTRICT; APN: 025 |
| 025320118 | PROJ-2021-00112 | In Review | A MINOR USE PERMIT TO CONSTRUCT A 2,200 SQUARE-FOOT CONVENIENCE STORE WITH A 3,258.5 SQUARE-FOOT CANOPY WITH SIX (6) FUEL DISPENSERS (C) |
| 025324107 | PRAA-2021-00028 | In Review | MAJOR REVISION TO APPROVED ACTION |
| 025603107 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603108 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603109 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603110 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603117 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603118 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025603119 | PROJ-2021-00081 | In Review | CONDITIONAL USE PERMIT TO CONSTRUCT A 259,367-SQUARE FOOT HIGH-CUBE WAREHOUSE BUILDING WITH 5,000 SQ.FT. OFFICE SPACE, LOCATED AT THE ON 13.23 ACRES, IN THE LIMITED INDUSTRIAL (LI) LAND USE CATEGORY, AND COMMUNITY INDUSTRIAL (BL/IC) ZONING DISTRICT, 5TH SUPERVISORIAL DISTRICT |
| 025609107 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025609107 | PROJ-2020-00242 | In Review | CONDITIONAL USE PERMIT - ADDITIONAL PARKING - NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610102 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610102 | PROJ-2020-00241 | In Review | CONDITIONAL USE PERMIT - HIGH CUBE WAREHOUSE AT 477,000 SQ. FT. WITH OFFICE AND APPROX. 61 DOCKS. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00238/CUP & PROJ-2020-00245/TPM, 2) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610103 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610103 | PROJ-2020-00241 | In Review | CONDITIONAL USE PERMIT - HIGH CUBE WAREHOUSE AT 477,000 SQ. FT. WITH OFFICE AND APPROX. 61 DOCKS. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00238/CUP & PROJ-2020-00245/TPM, 2) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610104 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610105 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610106 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610110 | PROJ-2021-00004 | In Review | This is a "VESTING" TENTATIVE PARCEL MAP. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |
| 025610110 | PROJ-2020-00241 | In Review | CONDITIONAL USE PERMIT - HIGH CUBE WAREHOUSE AT 477,000 SQ. FT. WITH OFFICE AND APPROX. 61 DOCKS. NOTE: Please see PROJ-2020-00204/Specific Plan for a comprehensive overall development at this site and related sites: 1) PROJ-2020-00238/CUP & PROJ-2020-00245/TPM, 2) PROJ-2020-00034/CUP and PROJ-2020-00246/TPM, 3) PROJ-2020-00241/CUP & PROJ-2021-0004/TPM, & 4) PROJ-2020-00242/CUP. |

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| 025612148 | PROJ-2020-00245 | In Review | <p>This is a "VESTING" TENTATIVE PARCEL MAP, consolidating 12 parcels into one large parcel of approx. 18.49 acres, to accommodate a 386,000-sq.ft. high-cut for a comprehensive overall development at this site, and related project cases/sites: 1) PROJ-2020-00238/CUP & PROJ-2020-00245/VTPM, 2) PROJ-2020-00127/CONCURRENT FILING - CONDITIONAL USE PERMIT, ZONING AMENDMENT, AND TENTATIVE TRACT MAP/CONDO MAP - 154 -unit condominium project on tw Bloomington located on Linden and south Orchard Street. General Plan Amendment/Zone Change/CUP and Tentative Tract Map. The County of San Bernard wil from R-20,000 to MDR. The project will have 2 points of ingress and egress. The project will be gated and maintained by an HOA. The proposed amenities wil General Plan Amendment & Zoning Amendment, amending Very Low Density Residential (VLDR) to Limited Industrial (LI) and Zoning Amendment, amending General Plan Amendment & Zoning Amendment, amending Very Low Density Residential (VLDR) to Limited Industrial (LI) and Zoning Amendment, amending General Plan Amendment & Zoning Amendment, amending Very Low Density Residential (VLDR) to Limited Industrial (LI) and Zoning Amendment, amending MINOR USE PERMIT TO ESTABLISH A USED TIRE SHOP WITH A CARETAKER RESIDENCE, LEGALIZE UNPERMITTED STRUCTURES AND INSTALL A 192-SQUARE FC MINOR USE PERMIT TO ESTABLISH A USED TIRE SHOP WITH A CARETAKER RESIDENCE, LEGALIZE UNPERMITTED STRUCTURES AND INSTALL A 192-SQUARE FC A ZONING AMENDMENT FROM SINGLE RESIDENTIAL (BL/RS-20M) TO SINGLE RESIDENTIAL (BL/RS-14M), AS AN UPZONE SITE, PURSUANT TO SB-330 – THE HC FOOT INDUSTRIAL WAREHOUSE BUILDING (PROJECT NUMBER: PROJ-2020-00127/CUP/GPA), LOCATED AT THE SOUTHWEST CORNER OF SLOVER AVENUE AN Conditional Use Permit and Zone Amendment applications for parcel / APN 025-101-76, Pre-App Meeting PREA-2021-00127. Proposing a 5,200 square-foot automated car wash, a fuel canopy with 10 fuel pumps (20 fueling positions) on the western 1.68 acres and a 4,400 square foot drive-thru restaurant and 8,C WIRELESS TELECOMMUNICATIONS TOWER</p> |
| 025703135 | PROJ-2022-00037 | In Review | |
| 025707103 | PROJ-2020-00127 | In Review | |
| 025707104 | PROJ-2020-00127 | In Review | |
| 025707139 | PROJ-2020-00127 | In Review | |
| 025901101 | PROJ-2020-00105 | In Review | |
| 025901127 | PROJ-2020-00105 | In Review | |
| 025916145 | PROJ-2021-00131 | In Review | |
| 025010176 | PROJ-2022-00073 | Submitted | |
| 025902401 | PROJ-2022-00059 | Submitted | |

Appendix G

Project VMT



Completely within a TPA? No (Fail)

Within a low VMT generating TAZ? Yes (Pass)

Note: Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.

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| Assessor Parcel Number (APN) | 025216145 |
| Traffic Analysis Zone (TAZ) | 53744601 |
| TAZ VMT | 22.2 |
| Jurisdiction VMT | 34.6 |
| % Difference | -35.78% |
| VMT Metric | PA VMT Per Service Population |
| Threshold | 34.6 |