

# NOTICE OF PUBLIC MEETING PLANNING COMMISSION

Planning Commission June 26, 2025 @ 5:30 PM 2603 Santa Clara Drive Santa Clara, Utah 84765 Phone: (435) 673-6712

Email: contact@sccity.org

**Public Notice** is hereby given that the Planning Commission of the City of Santa Clara, Washington County, Utah, will hold a Planning Commission Meeting in the City Council Chambers, 2603 Santa Clara

Drive, Santa Clara, Utah, on Thursday, June 26, 2025, commencing at 5:30 PM. The meeting will be broadcasted on our City website at https://santaclarautah.gov.

The agenda for the meeting is as follows:

- 1. Call to Order
- 2. Opening Ceremony
  - A. Pledge of Allegiance:
- 3. Conflicts and Disclosures
- 4. Working Agenda
  - A. Public Hearing
    - Consider a proposed Rezoning and Project Plan for the undeveloped property at the
      intersection of Pioneer Parkway and Red Mountain Drive and directly east of the
      Harmon's Shopping Center. Cole West LLC is proposing to rezone the property from the
      Planned Development Residential PDR Zone to the Planned Development Commercial
      PDC Zone to allow for a commercial development project. The subject property is 6.91
      acres.
    - 2. Consider a proposed PDR Zone Amendment and Project Plan for the undeveloped property at the intersection of Pioneer Parkway and Red Mountain Drive and directly northeast of the Harmon's Shopping Center. Cole West LLC is proposing to develop the site with eighty (80) residential dwelling units on 7.35 acres.

### B. Public Meeting

1. Consider a proposed Plat Amendment for the Silverado Santa Clara Subdivision. Cole West LLC is proposing to amend Lots 1, 2, and 3 of the original subdivision plat. The proposed Plat Amendment includes 2 lots instead of 3 lots. Lot 1 is 7.35 acres, with Lot 2 being 6.91 acres.

### 5. General Business

- A. Recommendation to City Council
  - 1. Recommendation to the City Council for a proposed Rezoning and Project Plan for the undeveloped property at the intersection of Pioneer Parkway and Red Mountain Drive and directly east of the Harmon's Shopping Center.
  - 2. Recommendation to the City Council for a proposed PDR Zone Amendment and Project Plan for the undeveloped property at the intersection of Pioneer Parkway and Red Mountain Drive and directly northeast of the Harmon's Shopping Center.
  - 3. Recommendation to the City Council for a proposed Plat Amendment for the Silverado Santa Clara Subdivision to be known as the CW Santa Clara Amended Subdivision.

### 6. Discussion Items

A. None

### 7. Approval of Minutes

A. Request Approval of Regular Meeting minutes: June 12, 2025

### 8. Adjournment

Note: In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the City at least 24 hours in advance of the meeting by calling (435) 673-6712.

Posted this 19th day of June 2025.	
Jim McNulty, Planning Director	



### City of Santa Clara 2603 Santa Clara Drive (435) 656-4690, Ext. 225 imcnulty@sccity.org

Staff Report

# **Property Rezoning & Project Plan Summary and Recommendation**

Public Body: Santa Clara Planning Commission

Meeting Date: June 26, 2025

Current Zone: Planned Development Residential, PDR
Proposed Zone: Planned Development Commercial, PDC
General Plan Designation: Main Street Commercial, MSC

Property Address: Northwest corner of Pioneer Parkway & Red Mountain Drive

**Property Size:** 6.91 acres

Request: Property Rezoning & Project Plan

Applicant Name: McKenna Christensen, Cole West LLC

**Staff Planner:** Jim McNulty **Meeting Type:** Public Hearing

### PROJECT DESCRIPTION

The applicant, McKenna Christensen, Cole West LLC, is requesting a Property Rezoning & Project Plan Review for the undeveloped property on the northwest corner of Pioneer Parkway and Red Mountain Drive, and directly east of Harmon's Shopping Center. The property is currently zoned Planned Development Residential, PDR and the applicant proposes to rezone it to the Planned Development Commercial, PDC Zone to allow for a commercial development project. The subject property is 6.91 acres in size.

The **previous applicant for the subject property was Silverado LLC.** The Planning Commission may recall holding public hearings in both 2022 and 2023 which included a Property Rezoning and Project Plan Review. The previous plans included a small amount of commercial along Pioneer Parkway, an Apartment Complex, and Mancaves Units which included a second story living space.

**Chapter 17.68, Planned Development Zones,** requires a review of the Project Plan including, site plan layout, building design and materials, landscaping, outdoor lighting, parking, fencing, signage, as well as other necessary items for a commercial project. Staff will further discuss the proposed project and requirements in the report.

### PROJECT PLAN REVIEW ITEMS

City staff have worked with the applicant on several items associated with the Project Plan. The following includes information on each item as required by Chapter 17.68, Planned Development Zone:

- 1. Site Plan Layout: Two (2) points of primary ingress/egress have been provided to the site from Red Mountain Drive and Pioneer Parkway. An internal reciprocal access providing a connection with the Harmon's Shopping Center is also proposed. A deceleration lane will be installed by the applicant allowing for right hand turning movements into the project off Pioneer Parkway. Drive aisle width is required to be a minimum of 26' for parking lot areas. The Plan includes several drive-thru aisles with one showing queuing for up to 14 vehicles. Pedestrian Crossings have been shown on the Plan allowing for connectivity, with a connection being provided to the residential portion of the project. The intent is to allow for pedestrian movement through the project with connection to Harmon's Shopping Center. Outdoor patios have also been included to allow for public space and outdoor dining. A copy of the Project Plan is attached.
- 2. Building Design & Materials: The proposed building materials include brick, CMU block, metal paneling, metal awnings, stucco, and glazing along the storefront. A set of building elevations (copy attached) have been provided which includes seven (7) buildings for the site. The proposed architectural design appears to provide a nice transition between the Harmon's Shopping Center and the proposed Red Mountain Row Residential Project. Roof top mechanical equipment must be appropriately screened and located behind a parapet wall. Building height is limited to 35' within the PDC zone. The applicant will be required to work with City staff during each individual Site Plan review on this item.
- 3. **Project Landscaping:** The final landscape and irrigation plans will be required to comply with **Ordinance #2024-02 (Water Efficient Landscaping & Conservation Standards).** The applicant will be required to work with City staff during each individual Site Plan review on this item.
- 4. Outdoor Lighting: Chapter 17.68.040 indicates that all outdoor lighting shall not adversely impact surrounding residential uses. All lighting shall be shielded and directed downward to avoid light spill. Parking lot lighting is limited to 16' in height which includes the base of the light pole. The applicant will be required to work with City staff during each individual Site Plan review on this item.
- 5. Required Parking: This is a large commercial project. City staff wants to make sure enough parking is available for each commercial tenant; however, we don't want the property to be over parked. The Project Plan includes 389 parking spaces for the site. It's likely that the number of parking spaces will change as the project is built out. Each individual Site Plan review will allow for the opportunity to review the needed parking for each building and tenants. The applicant will be required to work with City staff during each Site plan review on this item.
- 6. **Fencing:** Project fencing will likely be placed between the commercial and residential projects. If so, additional information and details will need to be determined during the Preliminary Subdivision Plat review and/or Site Plan review process.
- 7. **Project Signage:** Sign review will be done with each individual Site Plan review. All project signage will require Planning Commission review and approval as per the PDC zone. The applicant may want to consider a sign theme for the project allowing for a consistent look within the project.

Request: Property Rezoning & Project Plan

8. **Water Availability:** The applicant is required to obtain a will-serve letter or other verified documentation from the Washington County Water Conservancy District, WCWCD, prior to obtaining a building permit.

- 9. Soils Report: A Geotech Report (Subsurface Investigation) done by Applied Geo-Tech was previously submitted for the property. The site is suitable for various types of development including commercial and residential. However, precautionary measures are needed, and an updated Geotech Report will be required prior to development of each project phase. The applicant will be required to work with City staff during Preliminary Subdivision Plat and Site Plan Review for each project phase to determine compliance.
- 10. Traffic Study: A Traffic Impact Study, TIS done by Focus Engineering was submitted for the property. Five project accesses were assumed, which resulted in an acceptable LOS at each intersection. The traffic signal at the intersection of Pioneer Parkway and Red Mountain Drive became operation in October 2024 prior to the first PGA event at Black Desert. This was a critical traffic improvement for the area. The TIS also indicates an acceptable LOS at 2028 project buildout and into the future 2033.
- 11. **Development Agreement:** The applicant has been working with City staff and legal counsel on a Development Agreement for the project. Both parties are good with the DA as currently worded. A copy of the DA has been included.
- 12. **Project Narrative:** The applicant has submitted a **project narrative for your review and consideration** (copy attached). It's likely that Planning Commission members will have questions for the applicant during the meeting.

### **GENERAL PLAN CONSIDERATION**

The Santa Clara City General Plan includes a **Main Street Commercial**, **MSC land use designation for the subject property.** The proposed Planned Development Commercial, PDC Zone complies with the intent of the General Plan. The description and character objectives for the MSC states the following:

"Predominantly commercial uses on the ground level, including uses such as stores, restaurants, and offices with residences and/or offices on the 2<sup>nd</sup> floor. Projects should strive for continuous building frontage, with the ground floor being mostly storefront windows to create a pedestrian-friendly development".

This proposed use of property is encouraged by the General Plan.

### REZONING CONSIDERATION

Chapter 17.18.090 of the city code provides standards of review for the City. In consideration of any zoning map amendment (rezoning), the land use authority shall consider the following matters, and the City Council shall give reasonable consideration to the following:

- a. Is the proposed use suitable in view of the zoning and development of adjacent and nearby property.
   Yes.
- b. Will the proposed use adversely affect the existing use or suitability of adjacent or nearby property.

Request: Property Rezoning & Project Plan

No.

- c. Are there substantial reasons why the property cannot or should not be used as currently zoned.
- d. Will the proposed use cause an excessive or burdensome use of public facilities or services, including, but not limited to streets, schools, water or sewer utilities, and police or fire protection.
   No.
- e. Is the proposed use compatible with the purpose and intent of the General Plan.

Yes.

- f. Will the use be consistent with the purpose and intent of the proposed zoning district.
- g. Is the proposed use supported by new or changing conditions not anticipated by the General Plan.

  No.
- h. Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to the unrestricted use of property. **Yes.**

### **NEIGHBORHOOD RESPONSE**

Notices were sent to the property owners within 300' of the subject property. The subject property was also posted as per State Code. No responses have been received by City staff as of the writing of this report.

### STATE CODE CONSIDERATIONS

Utah Code, Section 10-9a-205 includes requirements for a Rezoning of property (zoning map amendment). To rezone a property, a city must hold at least one public hearing. Additionally, a public hearing to consider a rezoning of property requires 10 days' notice rather than 24 hours' notice. A notice must also be sent to all property owners within 300' of the subject property, with a notice in a visible location, with a sign of sufficient size and durability. The city is also required to post on the State Public Notice website. City Staff has determined that all State Code requirements have been met with this application.

### CITY STAFF RECOMMENDATION

City staff recommends that the Planning Commission review the submitted Rezoning Application and Project Plan to determine if the application is complete. If the application is determined to be complete, City staff would recommend that the Planning Commission forward a recommendation to the City Council for their review and consideration of the application subject to the following conditions:

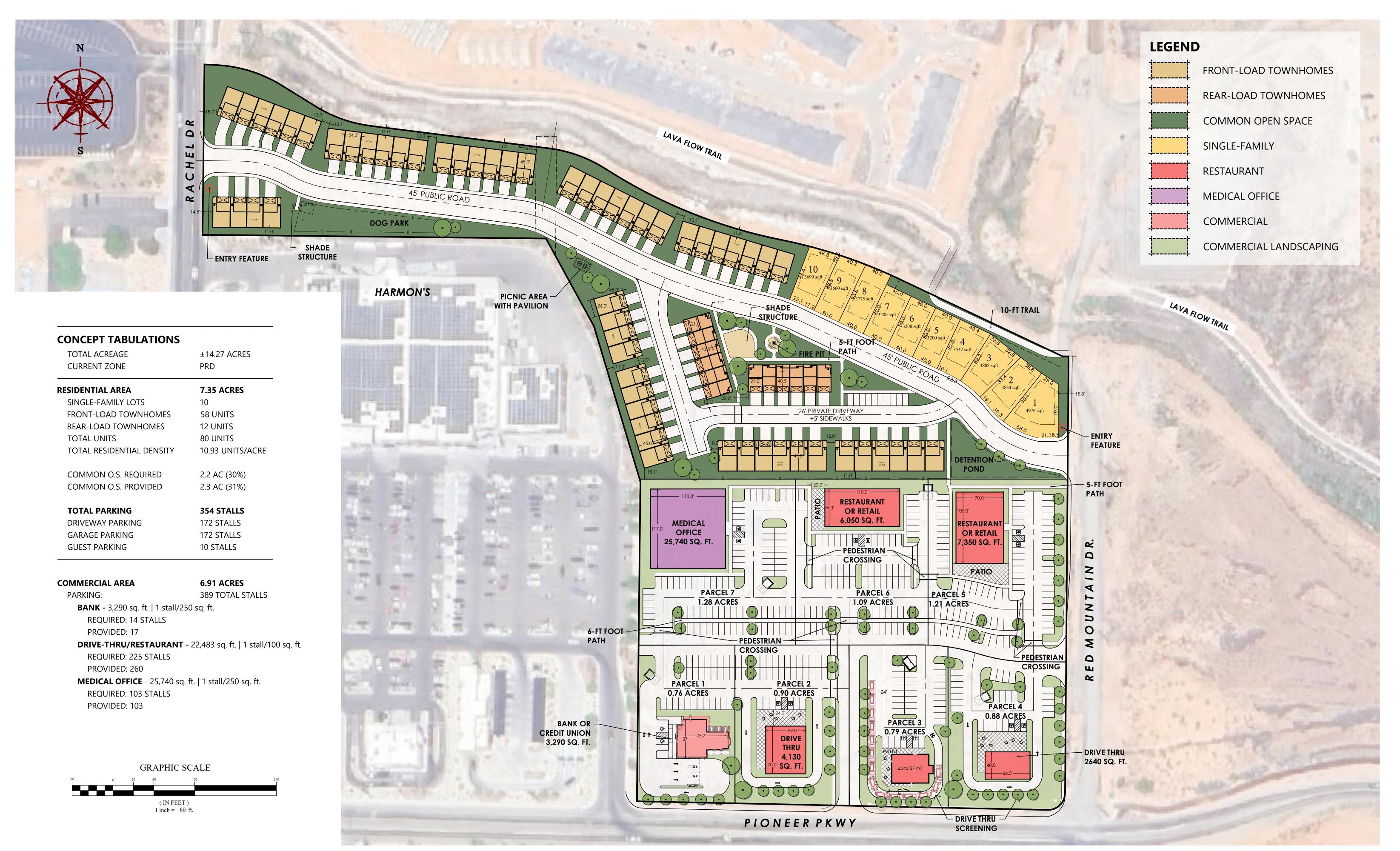
- 1. That the applicant is required to go through the Site Plan Review process for each project phase/building.
- 2. That the building design/materials/height/setbacks comply with the Project Plan as presented by the applicant. That substantial changes to these items require an amendment to the Project Plan.
- 3. That roof top mechanical equipment be appropriately screened and located behind a parapet wall.
- 4. That the final landscape and irrigation plans be required to comply with City Ordinance #2024-02, Water Efficient Landscaping & Conservation Standards.
- 5. That all outdoor lighting be shielded and directed downward to avoid light spill. Parking lot lighting is limited to 16' in height which includes the base of the light pole. That lighting details be provided with each individual Site Plan review.

### Request: Property Rezoning & Project Plan

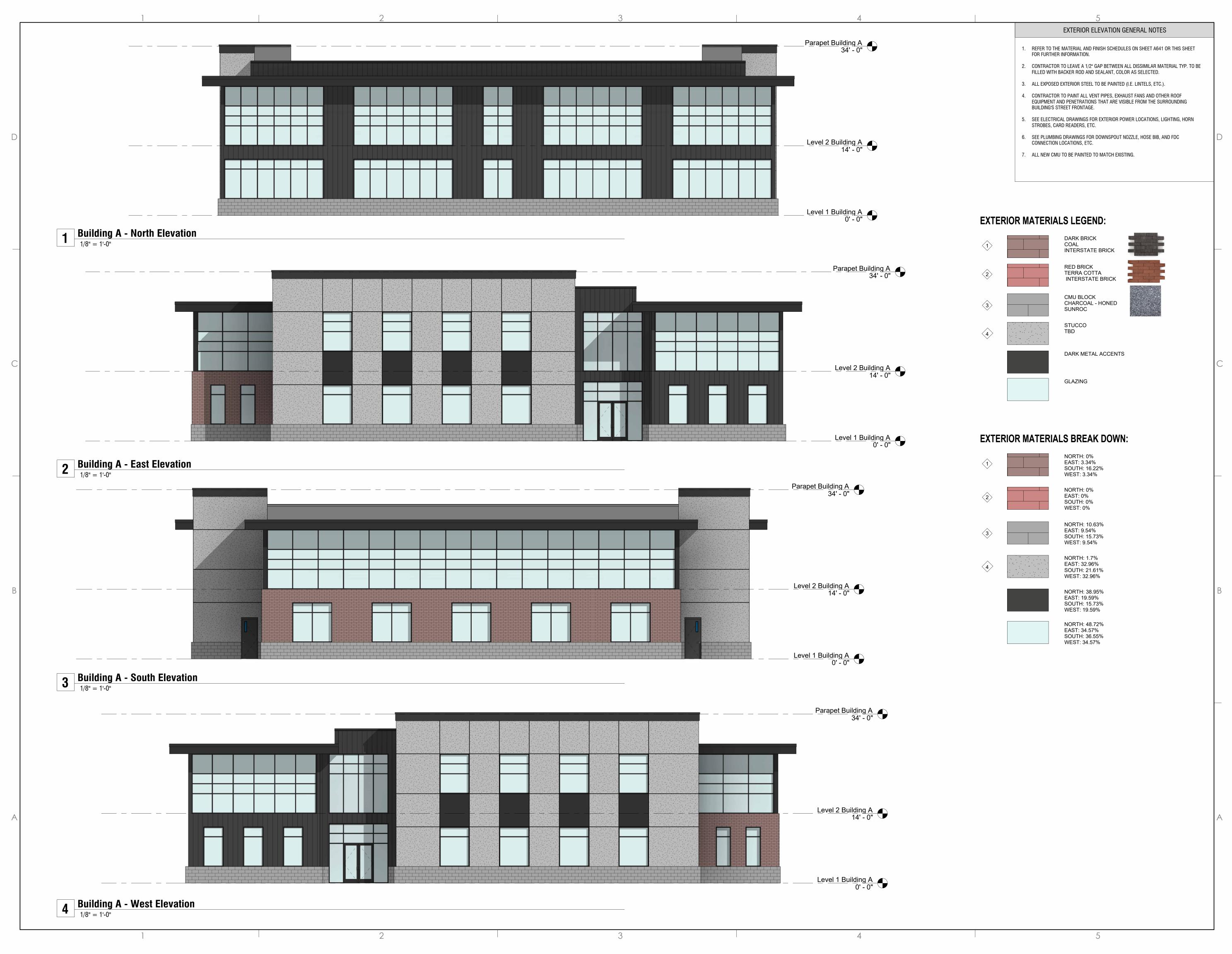
- 6. That the required parking be reviewed with each individual Site Plan review for the project.
- 7. That project fencing information be provided with individual Site Plan review if needed.
- 8. That project signage be reviewed with each individual Site Plan review.
- 9. That the applicant be required to obtain a will-serve letter or other verified documentation from the Washington County Water Conservancy District, WCWCD prior to obtaining a building permit.
- 10. That an updated Geotech Report for each project phase/building be required prior to site construction.
- 11. That the Traffic Impact Study, TIS for the project be implemented.
- 12. That a Development Agreement for the overall project be required and approved by the City Council prior to any site development.
- 13. That the proposed **property Rezoning** complies with Chapter 17.18.090 items:
  - a. The proposed use is suitable in view of the zoning and development of adjacent and nearby property;
  - b. The proposed use will not adversely affect the existing use or suitability of adjacent or nearby property;
  - c. There are not substantial reasons why the property cannot or should not be used as currently zoned;
  - d. The proposed use will not cause an excessive or burdensome use of public facilities or services, including, but not limited to streets, schools, water or sewer utilities, and police or fire protection;
  - e. The proposed use is compatible with the purpose and intent of the General Plan;
  - f. The proposed use is consistent with the purpose and intent of the proposed zoning district.
  - g. The proposed use is not supported by new or changing conditions anticipated by the General Plan;
  - h. The proposed use does reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to the unrestricted use of property.

### With the following findings:

- 1. That the Rezoning is compliant with the Santa Clara City General Plan, Section 3.4.2, Mixed-Use Land Uses (Main Street Commercial, MSC).
- 2. The MSC Land Use Designation allows for commercial uses on the ground floor, including stores, restaurants, and offices.
- 3. That the Harmon's Shopping Center directly west of the subject property is located within the Planned Development Commercial, PDC Zone.



# SANTA CLARA MIXED USE concept K





470 North 500 West Bountiful, UT 84010 801.698.6685 JON@ELEMENT-DESIGN.CO

THE DESIGNS SHOWN AND DESCRIBED HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATIONS & MODELS THEREOF, ARE PROPRIETARY & CAN NOT BE COPIED, DUPLICATED, OR COMMERCIALLY EXPLOITED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM ELEMENT DESIGN COLLECTIVE

PROJECT: SANTA CLARA

**REVISIONS:** 

EXTERIOR
ELEVATIONS
BLDG A

SHEET:

A202

DATE: 1/30/2025 10:36:39 AM





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PROJECT: SANTA CLARA

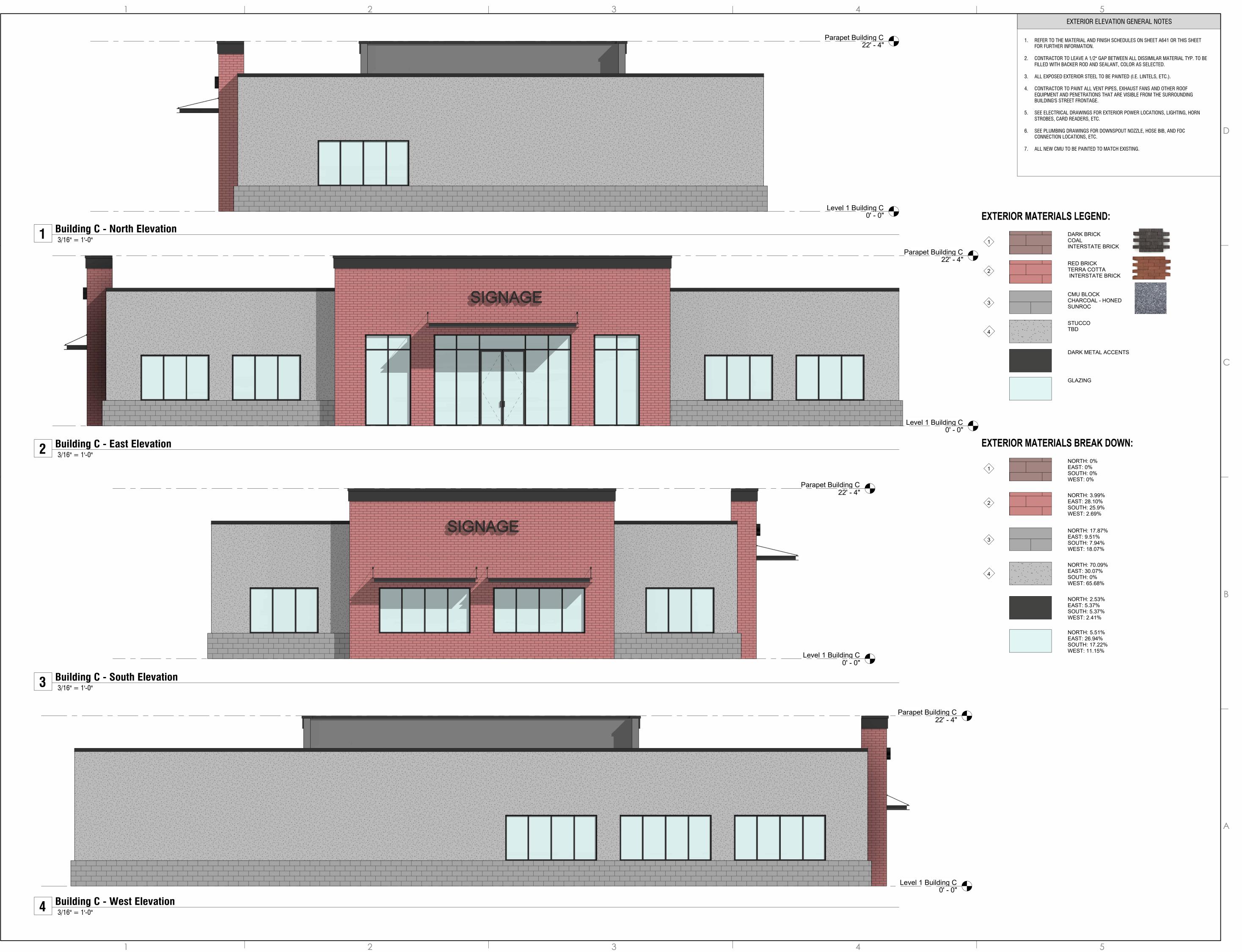
**REVISIONS:** 

EXTERIOR ELEVATIONS BLDG B

SHEET:

A20<sup>2</sup>

DATE: 1/30/2025 10:36:46 AM





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PROJECT:
SANTA CLARA

**REVISIONS:** 

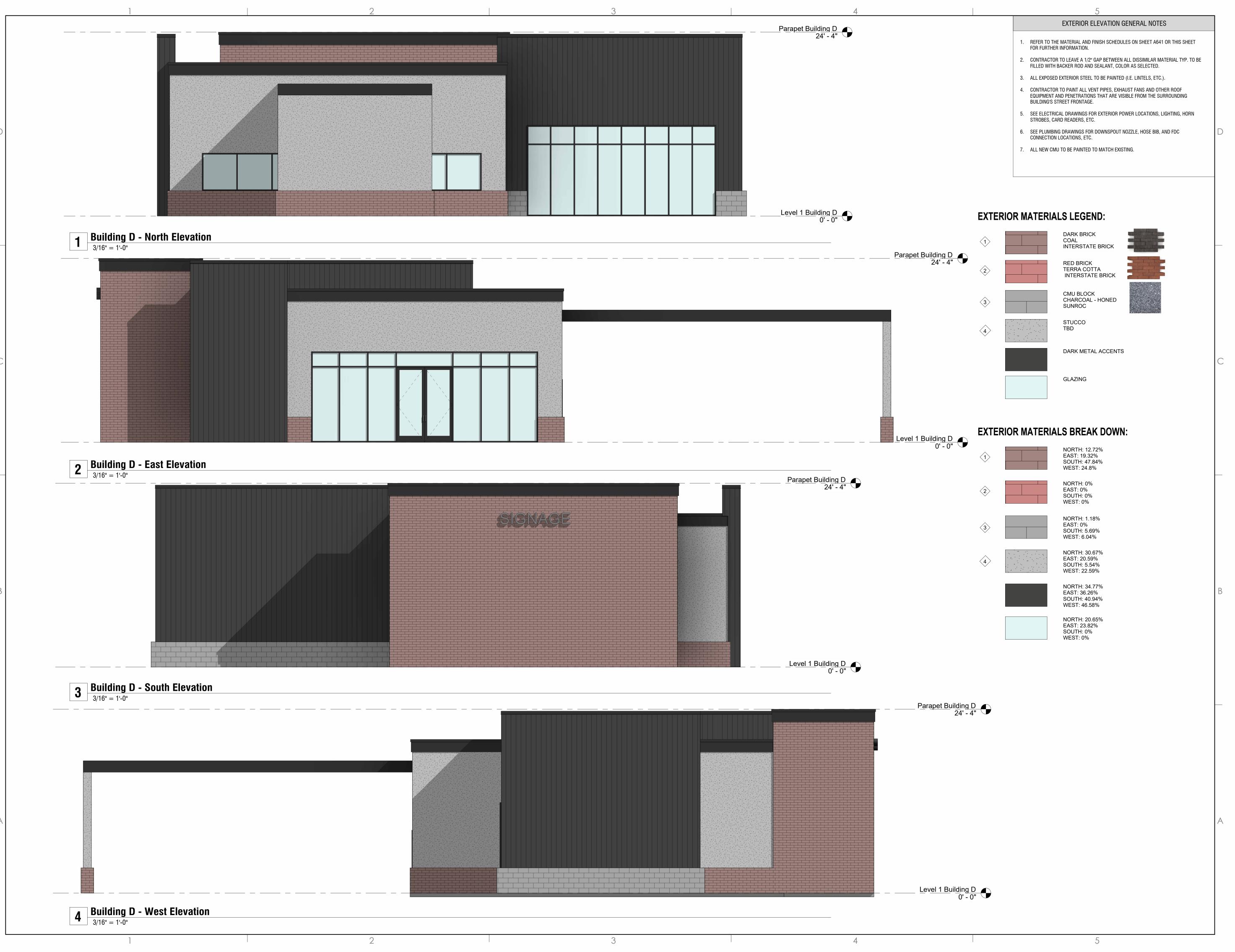
TITLE:

EXTERIOR ELEVATIONS BLDG C

SHEET:

A206

DATE: 1/30/2025 10:36:56 AM



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PROJECT: SANTA CLARA

**REVISIONS:** 

TITLE:

EXTERIOR ELEVATIONS BLDG D

SHEET:

A208

DATE: 1/30/2025 10:37:06 AM



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PROJECT: SANTA CLARA

**REVISIONS:** 

EXTERIOR ELEVATIONS BLDG E

SHEET:

A210

DATE: 1/30/2025 10:37:16 AM



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PROJECT: SANTA CLARA

**REVISIONS:** 

TITLE:

EXTERIOR ELEVATIONS BLDG F

SHEET:

A212

DATE: 1/30/2025 10:37:27 AM



EXTERIOR ELEVATION GENERAL NOTES

- REFER TO THE MATERIAL AND FINISH SCHEDULES ON SHEET A641 OR THIS SHEET
- 2. CONTRACTOR TO LEAVE A 1/2" GAP BETWEEN ALL DISSIMILAR MATERIAL TYP. TO BE FILLED WITH BACKER ROD AND SEALANT, COLOR AS SELECTED.
- 3. ALL EXPOSED EXTERIOR STEEL TO BE PAINTED (I.E. LINTELS, ETC.).
- 4. CONTRACTOR TO PAINT ALL VENT PIPES, EXHAUST FANS AND OTHER ROOF EQUIPMENT AND PENETRATIONS THAT ARE VISIBLE FROM THE SURROUNDING BUILDING'S STREET FRONTAGE.
- 5. SEE ELECTRICAL DRAWINGS FOR EXTERIOR POWER LOCATIONS, LIGHTING, HORN STROBES, CARD READERS, ETC.
- 6. SEE PLUMBING DRAWINGS FOR DOWNSPOUT NOZZLE, HOSE BIB, AND FDC CONNECTION LOCATIONS, ETC.
- 7. ALL NEW CMU TO BE PAINTED TO MATCH EXISTING.

UNLESS A PROFESSIONAL SEAL WITH SIGNATURE AND DATE IS AFFIXED, THIS DOCUMENT IS PRELIMINARY AND IS NOT INTENDED FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION

## **EXTERIOR MATERIALS LEGEND:**

DARK BRICK COAL INTERSTATE BRICK

RED BRICK TERRA COTTA INTERSTATE BRICK



CMU BLOCK CHARCOAL - HONED SUNROC





STUCCO TBD

DARK METAL ACCENTS



# **EXTERIOR MATERIALS BREAK DOWN:**

NORTH: 0% EAST: 0% SOUTH: 0% WEST: 0%

NORTH: 30.99% EAST: 20.73% SOUTH: 3.53% WEST: 20.45%

NORTH: 2.21% EAST: 10.88% SOUTH: 13.55% WEST: 11.06%

NORTH: 13.59% EAST: 40.39% SOUTH: 36.43% WEST: 43.39%



NORTH: 13.32% EAST: 12.18% SOUTH: 37.51% WEST: 11.75% NORTH: 39.9% EAST: 15.82% SOUTH: 8.99% WEST: 13.36%



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PROJECT: SANTA CLARA

**REVISIONS:** 

TITLE:

**EXTERIOR ELEVATIONS** BLDG G

SHEET:

DATE: 1/30/2025 10:37:35 AM

### RED MOUNTAIN ROW COMMERCIAL DEVELOPMENT

Cole West desires to develop 6.91 acres of land located at the northwest corner of Red Mountain Drive and Pioneer Parkway into a commercial development under the Planned Development Commercial zone under Title 17.68.020 of Santa Clara City's code. The proposed commercial uses include:

- Retail
- Fast Food and Fast Casual Restaurants
- Sit Down Restaurant
- Medical Office facility or hotel
- Bank or Credit Union

The proposed site plan includes a variety of uses that are intended to be synergistic and compliment one another with traffic drivers such as a medical office facility and a credit union, as well as sales-tax generating uses such as retail establishments and restaurants.

The commercial area includes a center walkway to promote connectivity and walkability among commercial uses as well as the proposed Red Mountain Row Townhomes and the Lava Flow Trail. In areas where drive-through facilities are planned, we have proposed screening that will shield visibility of cars from Pioneer Parkway. Parking has been located within the center of the development to allow both convenient parking for customers and a nice street presence on Pioneer Parkway.

The proposed total square footages of uses include the following:

- Medical Office: 20,000 - 25,000 square feet

- Bank or Credit Union: 3,000 – 4,000 square feet

- Restaurants, Retail & Services: 22,000 – 27,000 square feet

The proposed architectural elevations use materials and colors cohesive with both the proposed Red Mountain Row Townhomes and the existing Harmon's Shopping Center adjacent to the development. The materials proposed include brick, CMU block, metal paneling, stucco and glazing/storefront.

Warm Regards,

McKenna Christensen

Director of Development | Cole West

McKenna Christensen

mckenna@colewest.com



After recording, please send to: Santa Clara City Attn: City Recorder 2603 Santa Clara Drive Santa Clara, UT 84765

### **DEVELOPMENT AGREEMENT**

This Development Agreement (this "Agreement") is made and entered into as of the Effective Date (defined below), by and between CW Santa Clara Commercial, LLC, a Utah limited liability company, and CW Santa Clara Residential, LLC, a Utah limited liability company, (collectively, "Developer"), and Santa Clara City, a municipality and political subdivision of the State of Utah (the "City"). City and Developer are jointly referred to as the "Parties" and each individually as a "Party."

#### **RECITALS:**

- A. Developer is developing approximately 14.273 acres of real property more particularly described on Exhibit A attached hereto (the "Property").
- C. As of the recording of this Agreement, the Property is owned by Developer. By executing the consent and acknowledgment below, Developer agrees that the Property shall receive the entitlements and be subject to the rights, benefits, and obligations set forth in this Agreement.
- D. Developer may seek approval for its development of the Property pursuant to Section 17.68.030 of the Santa Clara City Code, which requires approval of this Agreement together with a zoning amendment, the Project Plan (defined below), and landscape plan for the Property.
- E. By this Agreement, the City and Developer confirm the Property's vested entitlements for development of the Project (defined below). The City has determined that entering into this Agreement furthers the purposes of Title 10, Chapter 9a of the Utah Code, the Utah Municipal Land Use, Development, and Management Act, the City's General Plan, and the City's land use ordinances. As a result of such determination, the City has elected to move forward with the approvals necessary to approve the development of the Project (defined below) in accordance with the terms and provisions of this Agreement. This Agreement is a "development agreement" within the meaning of and entered into pursuant to the terms of Utah Code Ann. §10-9a-102(2).

NOW THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Developer and the City hereby agree to the following:

### 1. Recitals; Definitions.

1.1. <u>Recitals</u>. The Recitals set forth above are incorporated herein by this reference.

Development Agreement CW Santa Clara Residential and Commercial

- 1.2. <u>Defined Terms</u>. Unless the context requires a different meaning, any term or phrase used in this Agreement that has its first letter capitalized has the meaning given to it by this Agreement. Certain terms and phrases are referenced below; others are defined where they appear in the text of this Agreement, including the exhibits. Any capitalized term used but not otherwise defined in this Agreement shall have the meaning ascribed to such term in the City Code.
  - 1.2.1. "Agreement" means this Agreement including all of its exhibits.
  - 1.2.2. "Applicable Law" has the meaning set forth in Subsection 13.1.
  - 1.2.3. "City" means the City of Santa Clara, UT, and includes, unless otherwise provided, any and all of the City's agencies, departments, officials, employees or agents.
  - 1.2.4. "City Code" means the Santa Clara City Code in effect as of Effective Date.
    - 1.2.5. "City Council" means the city council of the City.
  - 1.2.6. "Commercial Subdivision" means that portion of the Project as depicted on Exhibit  $\underline{C}$ .
  - 1.2.7. "Dwelling Units" means a permanent structure designed and capable of daily residential occupancy. A Dwelling Unit contains at least one kitchen, one bathroom, and one or more bedrooms.
    - 1.2.8. "Effective Date" has the meaning set forth in the Section 2 below.
  - 1.2.9. "Final Plat" means the recordable map or other graphical representation of land prepared in accordance with Utah Code § 10-9a-603, or any successor provision, and approved by the City, effectuating a subdivision of any portion of the Project.
  - 1.2.10. "Future Laws" means the laws, ordinances, policies, standards, guidelines, directives, procedures, and processing fee schedules of the City which may be in effect in the future at any time when a Land Use Application is submitted and which may or may not apply to the Project based upon the terms of this Agreement.
  - 1.2.11. "HOA" means a homeowner's association that Developer may elect to establish for the Property.
  - 1.2.12. "Landscape Plan" means the plan attached hereto as  $\underline{Exhibit\;E}$  and as required by Section 17.68.030(A)(3) of the City Code.

- 1.2.13. "Land Use Application" means an application required by Section 17.68.030 of the City Code that is required to develop land and construct improvements thereon.
- 1.2.14. "Lot(s)" means a tract of land that is created by and shown on a subdivision plat approved by the City and recorded with the Washington County Recorder's Office.
- 1.2.15. "Maximum Residential Density" means up to eighty (80) Dwelling Units that Developer may construct as part of the Project (including a minimum of 10 single-family lots).
- 1.2.16. "Open Space" means areas within the Project that include natural areas, landscaping, trails, or other areas of the Property that are not Lots.
- 1.2.17. "Private Driveways" means the driveways owned by a private party located in the Property.
- 1.2.18. "Project" means the development to be constructed by Developer on the Property and includes, but is not limited to, Lots, Dwelling Units, Private Driveways, and Open Space.
- 1.2.19. "Project Plan" means the concept project plan for the Property attached hereto as <u>Exhibit B</u> and constitutes the project master plan required by Section 17.68.030(C) of the City Code and the vested rights of this Agreement.
- 1.2.20. "Public Roads" means the roads owned by a public municipality located in the Property and as depicted on the Project Plan.
- 1.2.21. "Residential Subdivision" means that portion of the Project in which there are Dwelling Units and as depicted on  $\underline{\text{Exhibit }D}$ .
- 1.2.22. "System Improvement" means an improvement that is designed to serve areas within the community at large and which may serve the Project as a part of the community at large.
  - 1.2.23. "Term" has the meaning set forth in Subsection 13.2 below.
- 2. <u>Effective Date</u>. This Agreement is effective as of [Date] (the "<u>Effective Date</u>").

### 3. Vested Rights and Legislative Powers.

3.1. <u>Vested Rights</u>. The Parties specifically intend that this Agreement grants to Developer, and its permitted assigns, "vested rights" as that term is construed in Utah's common law and pursuant to Utah Code Ann., §10-9a-509. To the maximum extent

permissible under the laws of Utah and at equity, the City and Developer intend that this Agreement be construed to grant Developer all vested rights to develop the Project in fulfillment of the terms and provisions of this Agreement, the Project Plan, the landscaping plan, and the laws and ordinances that apply to the Property as of the Effective Date of this Agreement. The Parties intend that the rights granted to Developer under this Agreement are contractual and are in addition to those rights that exist under statute, common law, and at equity. Specifically, Developer is vested with the right to:

- 3.1.1. <u>Commercial Subdivision</u>. Develop the Commercial Subdivision in accordance with the permitted uses outlined in 17.68.020 of the City Code as of the Effective Date including but not limited to: business and professional offices, entertainment, financial institutions, fitness and recreational facilities, neighborhood service establishments, traditional sit-down restaurants, fast-food restaurants (including drive-up windows), retail/wholesale uses, a convenience store, and a hotel use.
- 3.1.2. **Residential Subdivision**. Develop the Residential Subdivision in accordance with the Santa Clara City PDR zone as of the Effective Date and the Dwelling Units up to the Maximum Residential Density (80) in accordance with the Project Plan. Units shall be limited to multi-family attached housing (townhomes) and single-family detached housing (detached). A minimum of ten (10) detached Single-Family Dwelling Units must be included in accordance with the Project Plan.
- 3.1.3. **Roads and Infrastructure**. Connect to existing public roads and infrastructure as depicted on the Project Plan and approved by the City.
- 3.1.3.3.1.4. Ownership of Dwellings. The Developer affirms that the Residential Subdivision is intended to be a for-sale residential community, primarily for owner-occupants. The CC&Rs recorded against the Residential Subdivision shall include ownership restrictions expressly prohibiting the bulk purchase or ownership of three (3) or more units in the Residential Subdivision by an institutional investor, corporate entity, or individual.
- 3.2. <u>Individually Platted Lots & Site Plan Review.</u> Developer shall reserve the right to apply for, plat, and construct lots and their associated infrastructure within the Property at its own discretion.
  - 3.2.1. <u>Commercial Subdivision.</u> The Commercial Subdivision of the Project Plan may be platted into individual lots with the ability to be sold or leased. Each building or pad within the Commercial Subdivision of the Project Plan shall go through the City's Site Plan review process.
  - 3.2.2. <u>Residential Subdivision.</u> Each Dwelling Unit or Lot, as applicable, shall be individually platted with the ability to be sold. Developer agrees to phase

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the platting of the Residential Subdivision in accordance with the Phasing Plan attached at Exhibit F. Subject to Planning Commission review and City Council approval, Developer may amend this Phasing Plan as needed, provided appropriate amenities, ingress, and egress are provided.

- 3.3. <u>Applicable Law</u>. The City's Future Laws with respect to the Project or the Property shall not apply except as follows:
  - 3.3.1. <u>Developer Agreement</u>. Future Laws that Developer agrees in writing to the application thereof to the Project;
  - 3.3.2. <u>Compliance with State and Federal Laws</u>. Future Laws which are generally applicable to all properties in the City and which are required to comply with State and Federal laws and regulations affecting the Project and do not effect a taking of the right to develop the uses and the densities described in this Agreement;
  - 3.3.3. <u>Safety Code Updates</u>. Future Laws that are updates or amendments to existing building, plumbing, mechanical, electrical, dangerous buildings, drainage, or similar construction or safety related codes, such as the International Building Code, the APWA Specifications, or by the State or Federal governments and are required to meet legitimate concerns related to public health, safety, or welfare, and that do not require the revision or reconfiguration of the road areas depicted on the Project Plan;
  - 3.3.4. <u>Taxes</u>. Taxes, or modifications thereto, so long as such taxes are lawfully imposed and charged uniformly by the City to all properties, applications, persons, and/or entities similarly situated;
  - 3.3.5. <u>Fees.</u> Changes to the amounts of fees for the processing of Land Use Applications that are generally applicable to all development within the City (or a portion of the City as specified in the lawfully adopted fee schedule) and which are adopted pursuant to State law; and
  - 3.3.6. <u>Impact Fees</u>. Impact fees or modifications thereto which are lawfully adopted, imposed, and collected on all areas of the City.
- 4. **Zoning.** Developer shall develop the Property in a manner that is consistent with the uses allowed by this Agreement and conceptually as depicted in the Project Plan.
  - 4.1. <u>Commercial Subdivision</u>. The <u>6.917.0</u> acres of the Commercial Subdivision as shown in the Project Plan, as of the execution of this Agreement, shall be rezoned as the City's Planned Development Commercial ("**PDC**") zone and developed in accordance with Applicable Law to a PDC zone as of the Effective Date.

4.2. **Residential Subdivision**. The 7.3523 acres of the Residential Subdivision as shown in the Project Plan, as of the execution of this Agreement, shall be rezoned as the City's Planned Development Residential ("**PDR**") zone and developed in accordance with Applicable Law to a PDR zone as of the Effective Date, provided that such development does not exceed the Maximum Residential Density.

### 5. **Developer Obligations.**

- 5.1. **Road Improvements**. Developer is entitled to develop the Project in accordance with the dimensional requirements and development standards allowed by this Agreement and the Project Plan. The City hereby consents to the layout and widths of the Private Driveways and Public Roads as generally depicted on the Project Plan.
  - 5.1.1. <u>Commercial Subdivision</u>. The Commercial Subdivision shall include full circulation access points on Pioneer Parkway and Red Mountain Drive. Developer shall work with the City's engineer and relevant third-party professionals to determine the final nature of the access road and its exact location prior to permit issuance. Developer to install on the Project a deceleration lane on Pioneer Parkway for access to the Commercial Subdivision and dedicate the lane to the City through the recording of the Final Plat. Developer shall restripe Pioneer Parkway as needed to provide a center turn lane for eastbound access to the Project.
  - 5.1.2. <u>Residential Subdivision</u>. The Private Driveways in the Residential Subdivision are for the sole use of the owners, guests, invitees, lessees, or permittees of the Dwelling Units within the Residential Subdivision. The Private Driveways shall be privately owned and maintained by Developer or HOA. The Public Roads may be used by the general public.
  - 5.1.3. **Public Road Dedication.** Developer, through the Final Plat, shall improve and dedicate a 45-foot right-of-way to the City connecting Red Mountain Drive to Rachel Drive as shown on the Project Plan.
- 5.2. **Project Improvements.** Developer shall be responsible for constructing and installing the culinary water, secondary water (if available), sewer, stormwater management facilities, and storm drain distributions lines within the Project that are necessary to connect to existing public infrastructure (collectively, the "Project Improvements"). The Project Improvements shall be dedicated to the City, or service provider(s), as applicable.
  - 5.2.1. <u>Sewer.</u> Developer shall construct a new sewer line in the Public Road connecting Rachel Drive and Red Mountain Drive and dedicate an easement for the same through the Final Plat process.

### 5.3. Landscaping

- 5.3.1. <u>Site Landscaping.</u> The site shall be landscaped in accordance with the City's waterwise landscape standards (Chapter 17.92, Water Efficient Landscaping and Conservation Standards) and as provided in the Landscape & Irrigation Plan attached hereto as <u>Exhibit E</u>.
- 5.4. <u>CC&Rs, HOAs, and Cooperation.</u> Developer shall record covenants, conditions and restrictions ("CC&Rs") and establish one or more homeowner's associations ("HOA") for the Lots within the Residential portion of the Property, and may establish a commercial owners association within the Commercial portion of the Property. Developer will draft CC&Rs in a manner that the HOAs, if there are more than one, will work cooperatively to maintain all Private Driveways, parking lots, and Open Space in the Project.
- 5.5. <u>Commercial Maintenance Agreement</u>. The Commercial Subdivision may be subject to an agreement between applicable owners that provides for and governs maintenance and cleanliness of the Commercial Subdivision of the Project.
- 5.6. <u>Commercial Subdivision Building Elements</u>. Developer shall work with City staff to implement certain building elements related to drive thru orientation and screening, building design and materials, parking, pedestrian circulation, and outdoor seating areas.

### 6. City's Obligations.

- 6.1. Conditions of Approval. The City shall (a) review, consider and execute all consents, submittals or other documents as may be required in connection with any Land Use Application, or other required governmental approvals; (b) meet and consider such actions as required by Title 10, Chapter 9a of the Utah Code, the Utah Municipal Land Use, Development, and Management Act, and applicable City ordinances to provide all appropriate consents, approvals, and opinions as requested by Developer from time to time. The City shall cooperate with Developer and contractors working on the Project in their endeavors to obtain any other permits and approvals as may be required from other governmental or quasi-governmental agencies having jurisdiction over the Property or portions thereof (such as, by way of example, public utilities or utility districts or agencies) and, at the request of Developer, in the execution of such permit applications and agreements as may be required to be entered into with such other agencies, which request shall not be unreasonably denied.
- 6.2. <u>Public Roads</u>. The City shall accept Developer's dedication of the Public Roads, so long as it is constructed to the City's standards and specifications. Acceptance of dedication associated with this development shall conform to all standard City practices, including applicable warranty periods and bond retention.
- 6.3. **System Improvements.** The existing 10" sewer line must be replaced with a 12" sewer line, and the City will pay for the difference in cost to purchase the larger pipe. The City shall not require Developer to construct or upsize any System Improvement,

unless the City and Developer execute a reimbursement agreement on terms acceptable to the Parties.

- 6.3.1. <u>Sewer.</u> In order to effectuate Developer's installation of the new sewer line and upon Developer recording the Final Plat, the City shall vacate existing sewer easement.
- 7. Assignment. Notwithstanding anything to the contrary in this Agreement, the rights and responsibilities of Developer under this Agreement may be assigned in whole or in part by Developer without the consent of the City, where such assignment is to an affiliate, or to an entity controlled or owned by Developer. All other assignments shall require the consent of the City as provided herein.
  - 7.1. Notice. Developer shall give notice in accordance with Section 11 of this Agreement to the City of any proposed assignment and provide such information regarding the proposed assignee that the City may reasonably request in making the evaluation permitted under this Section. Such notice shall include providing the City with all necessary contact information for the proposed assignee.
  - 7.2. **Partial Assignment.** If any proposed assignment is for less than all of Developer's rights and responsibilities, then the assignee shall be responsible for the performance of each of the obligations contained in this Agreement to which the assignee succeeds. Upon any such partial assignment, Developer shall be released from any future obligations as to those obligations which are assigned but shall remain responsible for the performance of any obligations that were not assigned.
  - 7.3. Grounds for Denying Assignment. The City may only withhold its consent if the City is not reasonably satisfied of the assignee's reasonable financial ability to perform the obligations of Developer proposed to be assigned.
  - 7.4. <u>Assignee Bound by this Agreement</u>. Any assignee shall consent in writing to be bound by the assigned terms and conditions of this Agreement as a condition precedent to the effectiveness of the assignment.
- 8. <u>Integration.</u> This Agreement contains the entire Agreement with respect to the subject matter hereof and integrates all prior conversations, discussions, or understandings of whatever kind or nature between the Parties and may only be modified by a subsequent writing duly executed by the Parties hereto.
- 9. <u>Severability</u>. If any part or provision of the Agreement shall be adjudged unconstitutional, invalid, or unenforceable by a court of competent jurisdiction, then such a decision shall not affect any other part or provision of this Agreement except that specific part or provision determined to be unconstitutional, invalid, or unenforceable. If any condition, covenant, or other provision of this Agreement shall be deemed invalid due to its scope or breadth, such provision shall be deemed valid to the extent of the scope or breadth permitted by law.

- 10. <u>Legal Rights.</u> The Developer is represented by counsel and has had an opportunity to receive advice from counsel on this matter.
- 11. <u>Notices</u>. Any notices, requests and demands required or desired to be given hereunder shall be in writing and shall be (a) served personally upon the party for whom intended, (b) sent by nationally recognized express delivery service, or (c) or if mailed, be by certified mail, return receipt requested, postage prepaid, to such party at its address shown below. Additionally, any such notices, requests and demands may be sent by electronic mail, so long as such notice is also delivered by one of the methods described above.

#### To Developer:

CW Santa Clara Commercial, LLC Attention: McKenna Christensen

610 North 800 West Centerville, Utah 84014

Email: mckenna@colewest.com

CW Santa Clara Residential, LLC Attention: McKenna Christensen 610 North 800 West

Centerville, Utah 84014 Email: mckenna@colewest.com

With a copy to: Cole West, LLC Attn: Quin Stephens 610 North 800 West Centerville, Utah 84014 Email: quin@colewest.com

To the City:	
	 _
With a copy to:	

Any party may change its address or notice by giving written notice to the other party in accordance with the provisions of this section.

- 12. <u>Amendment.</u> Developer may seek to amend the Project Plan pursuant to Section 17.68.070 of the City Code, provided that the amendment run concurrently with the Site Plan review.
  - 12.1. <u>Commercial Subdivision.</u> The City agrees that due to the varying needs of commercial businesses, Section 17.68.070 shall not apply to the Commercial Subdivision and Project Plan amendments to the Commercial Subdivision are only triggered by the following changes: shall be addressed through the City's Site Plan Review process. (i) increases to nonresidential floor area by more than a fifteen percent (15%); (ii) decreases to allocated parking by more than a ten percent (10%); (iii) modifications to a setback by more than 5 percent (5%); (iv) modifications to building height or lot width by more than five percent (5%); or (v) decreases total landscaped area more than five percent (5%).

### 13. General Terms and Conditions.

- 13.1. <u>Applicable Law</u>. This Agreement is entered into under and pursuant to, and is to be construed and enforceable in accordance with, the rules, regulations, official policies, standards, and specifications applicable to the development of the Project in effect on the Effective Date (the "<u>Applicable Law</u>"), including the applicable City Code, resolutions, state law, and federal law.
- 13.2. <u>Termination of Agreement</u>. The term of this Agreement shall commence on the Effective Date of this Agreement and shall continue in full force and effect until the earlier of the following events: (i) certificates of occupancy have been issued for all Dwelling Units and Commercial Buildings to be constructed in the Project, or (ii) fifteen (15) years from the date on which this Agreement is recorded with the Washington County Recorder's Office; provided, however, that if Developer is not in breach of any material provisions of this Agreement when said 15-year period expires, and any portions of the Project have not been completely built-out, then this Agreement shall automatically be extended for an additional period of five (5) years (as applicable, the "<u>Term</u>").
- 13.3. Run with the Land. This Agreement shall be recorded against the Project. The agreements, benefits, burdens, rights, and responsibilities contained herein shall be deemed to run with the land and shall be binding on and shall inure to the benefit of all successors in ownership of the Project, or portion thereof, as applicable, with respect to that portion of the Project owned by such successors in ownership. Nothing in this Agreement shall apply to residents or property owners who purchase or occupy developed Lots or Dwelling Units within the Project, it being the intent of this Agreement that it governs the development of the Project, not the use by subsequent owners or residents.
- 13.4. <u>Default & Remedies</u>. If either Developer or the City fails to perform their respective obligations under the terms of this Agreement (as applicable, the "<u>Defaulting Party</u>"), the non-defaulting party shall provide written notice to the Defaulting Party specifically identifying the claimed event of default and the applicable provisions of this Agreement claimed to be in default. The Defaulting Party shall immediately proceed to cure or remedy such default or breach within sixty (60) calendar days after receipt of such

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notice. The Parties shall meet and confer in an attempt to resolve the default but, in the event they are not able to do so, the Parties shall have the rights and remedies available at law and in equity, including injunctive relief or specific performance, but excluding the award or recovery of any damages. Any delay by a Party in instituting or prosecuting any such actions or proceedings or otherwise asserting its rights under this Article shall not operate as a waiver of such rights. If the City elects to consider terminating this Agreement due to an uncurred default by Developer, then the City shall give to Developer written notice of the City's intent to terminate this Agreement and the matter shall be scheduled for consideration and review by the City's legislative body at a duly noticed public meeting. Developer shall have the right to offer written and oral evidence prior to, or at the time of, said public meeting. If the City's legislative body determines that a material uncured Default has occurred and is continuing, the City may thereafter pursue the remedy of termination through an appropriate judicial proceeding.

- 13.5. Non-liability of City Officials or Employees. No officer, representative, agent, or employee of the City shall be personally liable to Developer or any successor-ininterest or assignee of Developer, in the event of any default or breach by the City or for any amount which may become due, Developer, or its successors or assignee, for any obligation arising out of the terms of this Agreement.
- 13.6. Referendum or Challenge. Both Parties understand that any legislative action by the City Council is subject to referral or challenge by individuals or groups of citizens, including approval of development agreements and a rezone of the Property. If a referendum or challenge relates to the City Council's approval of this Agreement and the referendum or challenge is submitted to a vote of the people pursuant to Utah Code Ann. § 20A-7-601, then Developer may deliver a notice of rescission to the City to terminate this Agreement. Upon Developer's delivery of a notice of rescission pursuant to this Section, this Agreement shall automatically terminate whereupon the Parties shall have no further rights or obligations under this Agreement. If the referendum or a legal challenge is successful in overturning the approval of this Agreement, then either party may terminate this Agreement by delivery of notice of recission, whereupon this Agreement shall automatically terminate, and the Parties shall have no further rights or obligations under this Agreement.
- 13.7. Ethical Standards. Developer represents that it has not: (a) provided an illegal gift or payoff to any officer or employee of the City, or former officer or employee of the City, or to any relative or business entity of an officer or employee of the City; (b) retained any person to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, other than bona fide employees of bona fide commercial agencies established for the purpose of securing business; (c) breached any of the ethical standards set forth in Utah Code Ann. § 10-3-1301, et seq. and/or 67-16-3, et seq.; or (d) knowingly influenced, and hereby promises that it will not knowingly influence, any officer or employee of the City or former officer or employee of the City to breach any of the ethical standards set forth in the Utah Code or City Code.

- 13.8. No Officer or Employee Interest. It is agreed that no officer or employee of the City has, or shall have, any pecuniary interest, direct or indirect, in this Agreement or the proceeds resulting from the performance of this Agreement. No officer, manager, employee, or member of Developer, or any member of any such persons' families, shall serve on any City board or committee or hold any such position which either by rule, practice, or action nominates, recommends, or supervises Developer's operations, or authorizes funding or payments to Developer. This Section does not apply to elected offices.
- 13.9. **Performance**. Each Party, person, and/or entity governed by this Agreement shall perform its respective obligations under this Agreement in a manner that will not unreasonably or materially delay, disrupt, or inconvenience any other Party, person, and/or entity governed by this Agreement, the development of any portion of the Property, or the issuance of Final Plat(s), certificates of occupancy, or other approvals associated therewith. This Section shall not be construed to require a Party or its representatives to provide an approval contrary to Applicable Law, regulations, or this Agreement.
- 13.10. Governing Law & Venue. This Agreement and the performance hereunder shall be governed by the laws of the State of Utah. Any action taken to enforce the provisions of this Agreement shall have exclusive venue in Washington County, Utah.
- 13.11. Third Party Rights. The Parties to this Agreement are Developer and the City. There are no intended third-party beneficiaries of this Agreement. The Parties acknowledge that this Agreement refers to a private development and that the City has no interest in, responsibility for, or duty to any third parties concerning any improvements to the Property.
- 13.12. <u>Further Documentation</u>. This Agreement is entered into by the Parties with the recognition and anticipation that subsequent agreements, plans, profiles, engineering, and other documentation implementing and carrying out the provisions of this Agreement may be necessary. The Parties agree to negotiate and act in good faith with respect to all such future items.
- 13.13. Force Majeure. Any prevention, delay, or stoppage of the performance of any obligation under this Agreement which is due to: strikes; labor disputes; inability to obtain labor, materials, equipment or reasonable substitutes therefore; acts of nature; governmental restrictions, regulations or controls; judicial orders; enemy or hostile government actions; wars or civil commotions; pandemics; fires or other casualties; or other causes beyond the reasonable control of the Party obligated to perform hereunder shall excuse performance of the obligation by that Party for a period equal to the duration of that prevention, delay, or stoppage.
- 13.14. **Relationship of Parties**. This Agreement does not create any joint venture, partnership, undertaking, business arrangement, or fiduciary relationship between the City and Developer.

13.15. <u>Headings</u>. The headings contained in this Agreement are intended for convenience only and are in no way to be used to construe or limit the text herein.

## **[SIGNATURE PAGE FOLLOWS]**

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement by and through their respective duly authorized representatives as of the day and year first written above

	DEVELOPER:
	CW Santa Clara Commercial, LLC a Utah limited liability company
	By: Cole West Entity Services, LLC a Utah limited liability company Its: Manager
	By: Cole West, LLC a Utah limited liability company Its: Manager
	By: Name: Colin Wright Its: Manager
STATE OF UTAH	)
COUNTY OF DAVIS	: ss. )
Colin Wright, who, through the abo Commercial, LLC, a Utah limited lial proven on the basis of satisfactory of	, 2025, personally appeared before referenced entities, is the Manager of CW Santa Claility company, whose identity is personally known to me, vidence, to be the person who executed the Development y and who duly acknowledged to me that he executed to
	Notary Public

		CW Santa Clara Residential, LLC a Utah limited liability company
		By: Cole West Entity Services, LLC a Utah limited liability company Its: Manager
		By: Cole West, LLC a Utah limited liability company Its: Manager
		By: Name: Colin Wright Its: Manager
STATE OF UTAH	)	
COUNTY OF DAVIS	: ss. )	
Colin Wright, who, through the ab Residential, LLC, a Utah limited lia proven on the basis of satisfactory	pove referenced ability company evidence, to be any and who d	, 2025, personally appeared before me lentities, is the Manager of CW Santa Clara whose identity is personally known to me, or the person who executed the Development uly acknowledged to me that he executed the
		Notary Public
		I votal y 1 dolle

### SANTA CLARA CITY

	Ву:
	Name:
	Its:
Attest:	
City Recorder	
City Recorder	
STATE OF UTAH	) : ss.
COUNTY OF WASHINGTON	)
On this day of, the authoriz	, 2025, personally appeared before me zed signer of Santa Clara City, whose identity is personally
	executed the Development Agreement on behalf of Santa Clara o me that he executed the same for the purposes therein stated.
	Notary Public
Approved as to Form:	
	<u> </u>
City Attorney	

### **OWNER'S CONSENT:**

The Developer, as Owner of the Property consents to the foregoing Agreement, and subjecting the Property to the Project, approval, obligations and benefits described herein.

	CW Santa Clara Commercial, LLC a Utah limited liability company
	By: Cole West Entity Services, LLC a Utah limited liability company Its: Manager
	By: Cole West, LLC a Utah limited liability company Its: Manager
	By:Name: Colin Wright Its: Manager
) · ss	
)	
ve referenced oility company evidence, to be	_, 2025, personally appeared before me entities, is the Manager of CW Santa Clara, whose identity is personally known to me, or e the person who executed the Development ally acknowledged to me that he executed the
	Notary Public
	ve referenced oility company evidence, to be

		CW Santa Clara Residential, LLC a Utah limited liability company
		By: Cole West Entity Services, LLC a Utah limited liability company Its: Manager
		By: Cole West, LLC a Utah limited liability company Its: Manager
		By: Name: Colin Wright Its: Manager
STATE OF UTAH	)	
COUNTY OF DAVIS	: ss. )	
Colin Wright, who, through the al Residential, LLC, a Utah limited lia proven on the basis of satisfactory	bove reference ability company evidence, to pany and who	
		Notary Public

## EXHIBIT A

Legal Description of the Property

PARCEL 1:			
PARCEL 2:			

PARCEL 3:

## EXHIBIT B

Project Plan

## EXHIBIT C

Commercial Subdivision

## EXHIBIT D

Residential Subdivision

## EXHIBIT E

Landscape Plan

## EXHIBIT F

Residential Subdivision Phasing Plan

## **SANTA CLARA MIXED USE** TRAFFIC IMPACT STUDY

SANTA CLARA, UT





JANUARY 10, 2025

24-0446



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## 1.0 Executive Summary

## 1.1 DESCRIPTION OF PROJECT

This report presents the results of a traffic impact analysis for the Santa Clara Mixed Use Development, located north of Pioneer Parkway and west of Red Mountain Road in Santa Clara, Utah. The Santa Clara Mixed Use Development is planned for 11 single-family homes, 65 townhomes, 10,000 sq. ft. strip retail plaza, 3,750 sq. ft. drive-in bank, 8,000 sq. ft. fast casual restaurant, two (2) 7,000 sq. ft. fast-food restaurants with drive-through, and a 2,600 sq. ft. fast food restaurant with drive-through.

The proposed site is divided into two separate land uses. To the north consist of the residential townhomes and single-family homes. This area will have two accesses. The first access, labeled as Access 1, will connect onto Rachel Drive to the west of the development. The second access to this area of the development, labeled as Access 5, will provide access onto Red Mountain Drive. South of the residential area of this development will consist of the commercial and retail land uses. The existing Business Access to the Harmons Development, will connect to this proposed development. The main access to the Santa Clara Mixed Use Development, labeled as Access 3, is located to the south of the development and will provide access onto Pioneer Parkway. Access 4, located east of the development, will provide access onto Red Mountain Drive.

The proposed parcel for Santa Clara Mixed Use Development currently consists of undeveloped land. This development borders Lava Flow Trail to the north, Pioneer Parkway to the south, Red Mountain Drive to the east, and the Harmons and other businesses, along with Rachel Drive to the west. Figure 1 illustrates the Vicinity Map and the location of this development in relation to the adjacent roadway network.

For purposes of this study, and following Santa Clara City guidelines for a traffic impact study, the analysis will consist of the following intersections:

- Rachel Drive and the Business Access
- Rachel Drive & Pioneer Parkway
- Red Mountain Drive & Pioneer Parkway

The five accesses to the development are also included in the analysis. The proposed development is planned to be built out by the end of 2028. Refer to Figure 2 for the overall site plan of the Santa Clara Mixed Use Development and the proposed access locations.



Using the Trip Generation Manuals published by the Institute of Transportation Engineers (ITE), the Santa Clara Mixed Use Development is anticipated to generate 851 AM peak hour trips (429 entering the site and 422 exiting the site) and 840 PM peak hour trips (441 entering the site and 399 exiting the site) on an average weekday, with an Annual Average Daily Traffic (AADT) volume of 10,029 vehicles.

## 1.2 FINDINGS

Following the city's guidelines, the Existing Year, Opening Year, and Future Year (five years after Opening Year) are all scenarios analyzed in this study. Based on the analysis performed in this traffic impact study, the following tables present the findings under the study scenarios for the 2024 Existing, 2028 Opening Year, and 2033 Future Year scenarios.

Table E1 – Existing, Opening & Future Year Level of Service

	E	XISTING, OP	ENING & FL	JTURE LEVEL (	OF SERVICI	SERVICE			
INTERSECTION	2024 EXIST	TING YEAR	2028 OPE	NING YEAR	2033 FUTURE YEAR				
	AM	PM	AM	PM	AM	PM			
Rachel Drive & Business Access	b(11.7)	b(13.5)	b(12.6)	c(15.2)	b(14.6)	c(19.5)			
Rachel Drive & Pioneer Parkway	B(10.4)	B(10.3)	B(11.1)	B(10.7)	B(13.3)	B(11.6)			
Red Mountain Drive & Pioneer Parkway	B(18.0)	B(18.8)	B(19.8)	B(19.8)	C(25.6)	C(23.6)			

<sup>\*</sup>Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters)

As illustrated in Table E1, all the study area intersections, currently function with acceptable levels of service (LOS). Under the 2028 Opening Year scenario, the intersections are projected to continue to function with acceptable LOS. As growth continues throughout this study area, under the 2033 Future Year scenario, all intersections will continue to function with acceptable LOS.

With the addition of the Santa Clara Mixed Use Development, the following table illustrates the levels of service at the study area intersection and the proposed accesses.



Table E2 – Opening & Future Year with Project Level of Service

	OPENING & FUTURE YEAR W/ PROJECT LEVEL OF SERVICE				
INTERSECTION	2028 OPENI	NG w/ PROJ	2033 FUTURE w/ PROJ		
	AM	PM	AM	PM	
Rachel Drive & Business Access	c(16.8)	c(20.0)	b(21.6)	d(29.8)	
Rachel Drive & Pioneer Parkway	B(12.7)	B(11.7)	B(15.6)	B(13.1)	
Red Mountain Drive & Pioneer Parkway	C(21.3)	C(21.5)	C(28.8)	C(27.4)	
Rachel Drive & Access 1	b(11.7)	b(12.1)	b(12.4)	b(12.9)	
Access 3 & Pioneer Parkway	c(16.1)	c(20.2)	c(18.7)	d(25.3)	
Red Mountain Drive & Access 4	a(9.5)	a(9.6)	a(9.2)	a(9.3)	
Red Mountain Drive & Access 5	a(8.8)	a(8.9)	a(8.8)	a(8.9)	
*Values represent the overall LOS for all s	ianalized inter	sections (uppe	rcase letters) an	d the worst	

<sup>\*</sup>Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters)

As seen in Table E2, with the addition of the traffic generated by the Santa Clara Mixed Use Development at full build-out, all intersections will continue to function at acceptable levels of service D or better under the 2028 Opening Year and 2033 Future Year scenarios.

## 1.3 RECOMMENDATIONS

Using the existing and projected traffic volumes at each of the study area intersections, both with and without the Santa Clara Mixed Use Development, the following are the recommendations to improve the flow of traffic.

## 2024 Existing Scenario

Under the existing conditions, all the study area intersections function with an acceptable level of service (LOS) C or better.

## 2028 Opening Year Scenario

With the projected growth within this study area for the Santa Clara Mixed Use Development, all the study area intersections will continue to function at acceptable levels of service.



## 2028 Opening Year w/ Project Scenario

With the full build-out of the Santa Clara Mixed Use Development by 2028, all intersections within the study area are anticipated to continue to function at acceptable levels of service (LOS).

The westbound right turn traffic volume along Pioneer Parkway at Access 3 to the proposed development does meet the threshold for installation of a separate right turn lane. The eastbound left turn traffic volume along Pioneer Parkway at Access 3 also meets the threshold for installation of separate left turn lane. With the existing width of Pioneer Parkway, it is recommended with some adjustment to the existing striping, the separate left turn lane can be implemented.

## 2033 Future Year Scenario

Following Santa Clara City guidelines and analyzing 5 years beyond the anticipated full build-out of the proposed development, it is anticipated all intersections within this study will function with acceptable levels of service.

## 2033 Future Year w/Project Scenario

Under the 2033 Future Year with Project scenario, all intersections are anticipated to continue to function with acceptable levels of service.



## 2.0 Introduction

## 2.1 DEVELOPMENT DESCRIPTION

The proposed Santa Clara Mixed Use Development is situated on roughly 15 acres of land located north of Pioneer Parkway and west of Red Mountain Drive in Santa Clara, Utah. This proposed development will consist of 11 single-family homes, 65 Townhomes, 10,000 sq. ft. strip retail plaza, 3,750 sq. ft. drive-in bank, 8,000 sq. ft. fast casual restaurant, two (2) 7,000 sq. ft. fast-food restaurants with drive-through, and a 2,600 sq. ft. fast food restaurant with drive-through. This development is expected to be completed by 2028.

The proposed site is divided into two separate land uses. To the north consist of the residential townhomes and single-family homes. This area will have two accesses. The first access, labeled as Access 1, will connect onto Rachel Drive to the west of the development. The second access to this area of the development, labeled as Access 5, will provide access onto Red Mountain Drive. South of the residential area of this development will consist of the commercial and retail land uses. The existing Business Access to the Harmons Development, will connect to this proposed development. The main access to the Santa Clara Mixed Use Development, labeled as Access 3, is located to the south of the development and will provide access onto Pioneer Parkway. Access 4, located east of the development, will provide access onto Red Mountain Drive.

Refer to the Vicinity Map and Site Plan in Figures 1 and 2, respectively, for the location of the new development, the layout of the site and the locations of the proposed accesses.



## SANTA CLARA MIXED USE FIGURE 1 - VICINITY MAP











## 3.0 Existing Conditions

## 3.1 ROADWAYS

<u>Rachel Drive</u>: Rachel Drive is a minor collector that is owned and maintained by the city. Rachel Drive runs north and south and provides access to the residential neighborhoods to the north and south of the proposed development. Within this study area, Rachel Drive consists of one lane in the northbound direction and one lane in the southbound with a center two-way left turn lane. Rachel Drive has a posted speed limit of 25 mph.

<u>Pioneer Parkway:</u> Pioneer Parkway is a major collector roadway that is owned and maintained by the city. Currently Pioneer Express Parkway consists of one lane in the eastbound direction and one lane in the westbound direction. Pioneer Parkway provides access to Old Highway 91 to the west and connects with Snow Canyon Parkway to the east. The posted speed limit is 35 mph.

<u>Red Mountain Drive</u>: Red Mountain Drive is a roadway that is owned and maintained by the city. Red Mountain Drive was recently constructed and the intersection with Pioneer Parkway recently signalized. Red Mountain Drive has a speed limit of 25 mph.

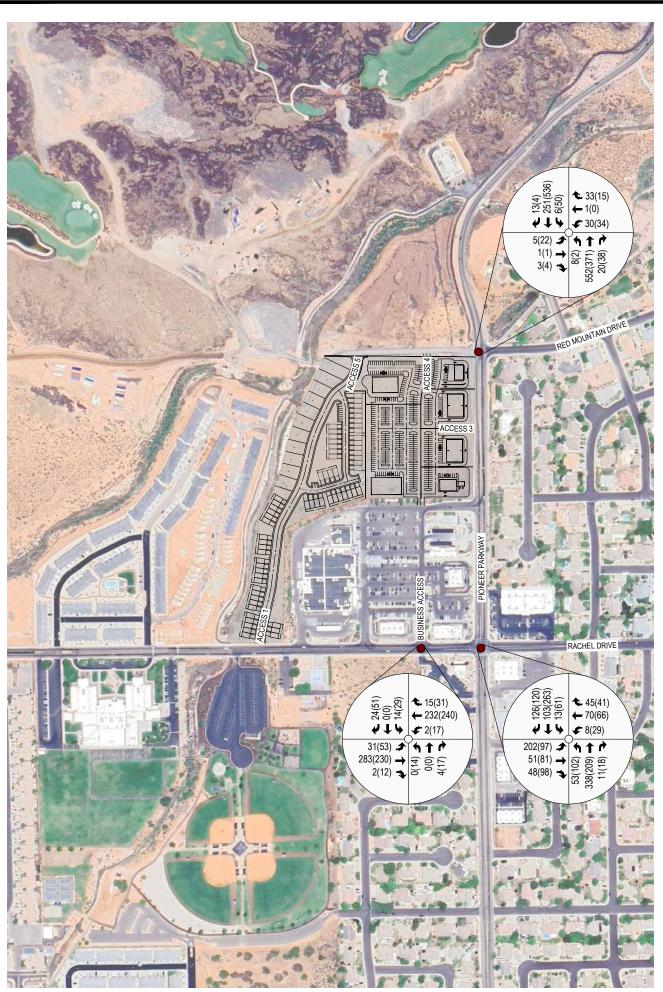
## 3.2 EXISTING TRAFFIC VOLUMES

From discussions with Santa Clara City Engineering and Planning staff and based on the amount of traffic anticipated to be generated by this development, it was determined existing traffic counts would be collected at the following intersections:

- Rachel Drive & Business Access
- Rachel Drive & Pioneer Parkway
- Red Mountain Road & Pioneer Parkway

Existing AM and PM peak hour traffic counts were collected between 7 AM and 9 AM and 4 PM and 6 PM at these intersections on December 12, 2024. From the existing counts that were collected, it was determined the AM peak hour at Rachel Drive/Business Access and Rachel Drive/Pioneer Parkway intersections is from 7:30 AM to 8:30 AM. The AM peak Hour at Red Mountain Drive/Pioneer Parkway intersection was determined to be 7:15 AM to 8:15 AM. The PM peak hour also did vary between the three intersections from 4:45 PM to 5:45 PM and also from 5:00 PM to 6:00 PM. These peak hours represent the peak hours for a residential development as this is the time people are traveling to and from work and school. These volumes are illustrated in Figure 3.











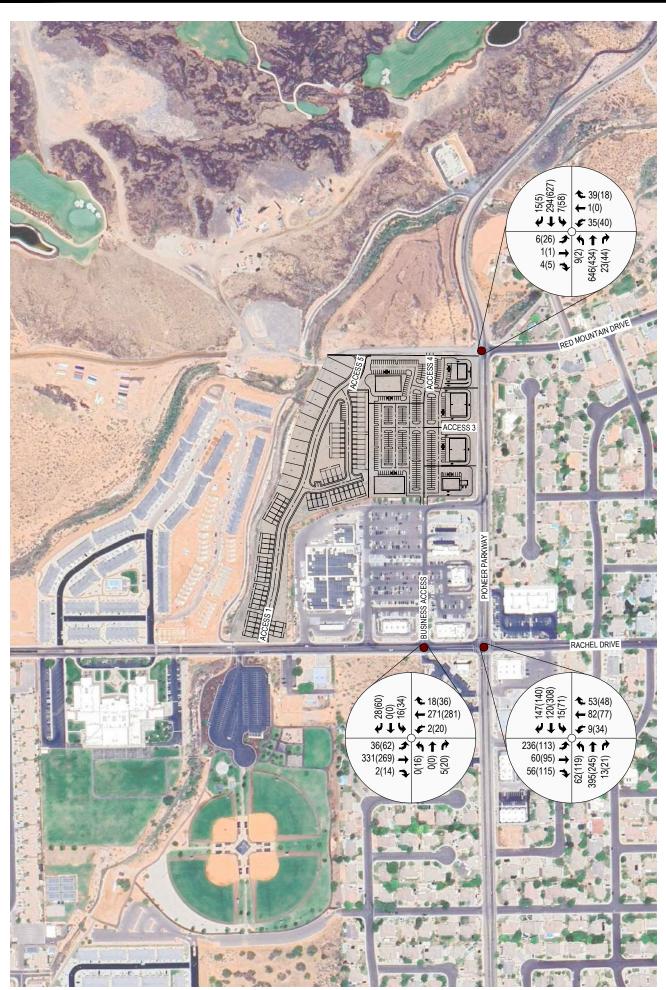
## 4.0 Opening and Future Year Traffic Conditions

Opening Year traffic, also known as Background traffic, is the traffic that is on the roadways within the study area regardless if the proposed development is constructed or not. These traffic volumes are a projection of growth within the study area based on current land available and opportunities for future development within this area.

Most of the area around this development is built out, aside from open space to the north. With the connection of Red Mountain Drive to Snow Canyon Parkway, it is assumed most of the future traffic from future developments north of the Santa Clara Mixed Use Development will travel north to access onto Snow Canyon Parkway. Therefore, it is assumed an average growth of 4% will occur within this study area from 2024 to 2033. Applying the assumed growth rates to the existing traffic volumes, the projected traffic volumes for the 2028 Opening Year traffic volumes are illustrated in Figure 4.

Following the city's guidelines, this analysis also looked at five years after Opening Year. Applying the growth rates described above to the Existing and Opening Year traffic volumes, the 2033 Future Year traffic volumes are generated. These volumes can be found in Figure 5.

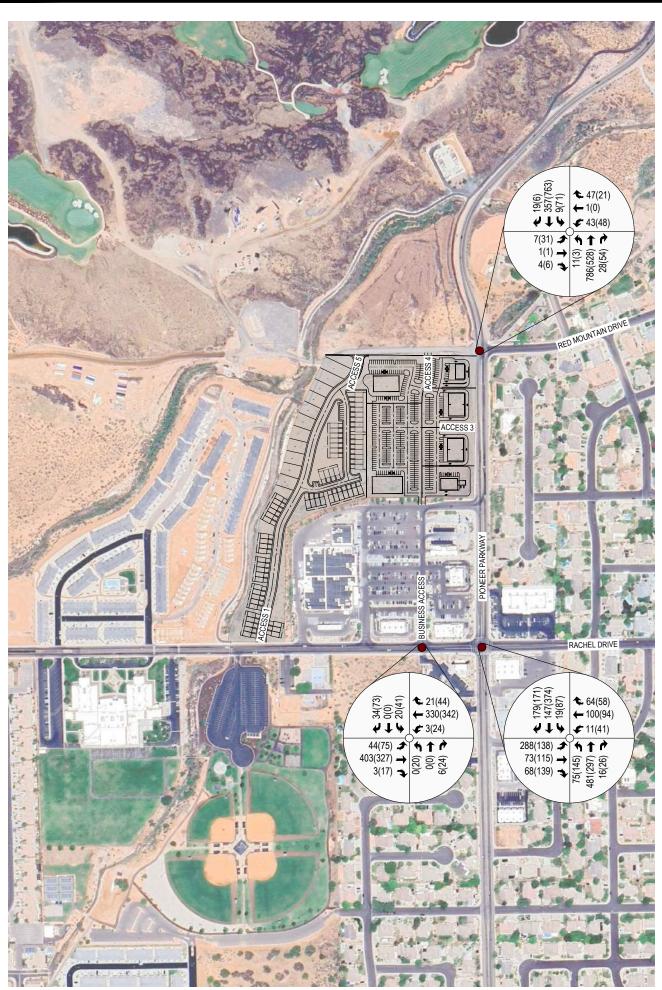




# SANTA CLARA MIXED USE FIGURE 4 - 2028 OPENING YEAR TRAFFIC VOLUMES XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES







## SANTA CLARA MIXED USE FIGURE 5 - 2033 FUTURE YEAR TRAFFIC VOLUMES XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES





## 5.0 Trip Generation and Trip Distribution

The full build-out of the proposed Santa Clara Mixed Use Development will consist of 11 single-family homes, 65 townhomes, 10,000 sq. ft. strip retail plaza, 3,750 sq. ft. drive-in bank, 8,000 sq. ft. fast casual restaurant, two (2) 7,000 sq. ft. fast-food restaurants with drive-through, and a 2,600 sq. ft. fast food restaurant with drive-through. Trip generation rates were determined using the 11th Edition of the Trip Generation Manual. This manual is an ITE information report, published by the *Institute of Transportation Engineers*. Trips generated by the proposed development which will occur during the peak hours of the proposed development were used for the analysis. The Peak Hour of Adjacent Street Traffic rates are used to generate the AM and PM peak hour volumes based on the number of dwelling units and square footage of the commercial and retail businesses. The trips generated from the proposed development are presented in Table 1.

Table 1 - Trip Generation

ITE Land	ITE Land Use Land Use		Size	Daily	Trip Gener	ation (AM)	Trip Gener	ration (PM)
Code	Lana use	Description	3126	(AADT)	Enter	Exit	Enter	Exit
210	Single-Family Detached Housing	D.U.	11	104	2	6	7	3
215	Single-Family Attached Housing	D.U.	65	468	8	23	22	15
822	Strip Retail Plaza (<40k)	1,000 S.F.	10	545	14	10	33	33
912	Drive-In Bank	1,000 S.F.	3.75	376	22	15	39	40
930	Fast Casual Restaurant	1,000 S.F.	8	777	6	5	55	45
934	Fast-Food Restaurant with Drive-Thru	1,000 S.F.	7	3272	159	153	120	111
934	Fast-Food Restaurant with Drive-Thru	1,000 S.F.	7	3272	159	153	120	111
934	Fast-Food Restaurant with Drive-Thru	1,000 S.F.	2.6	1215	59	57	45	41
	Total			10029	429	422	441	399

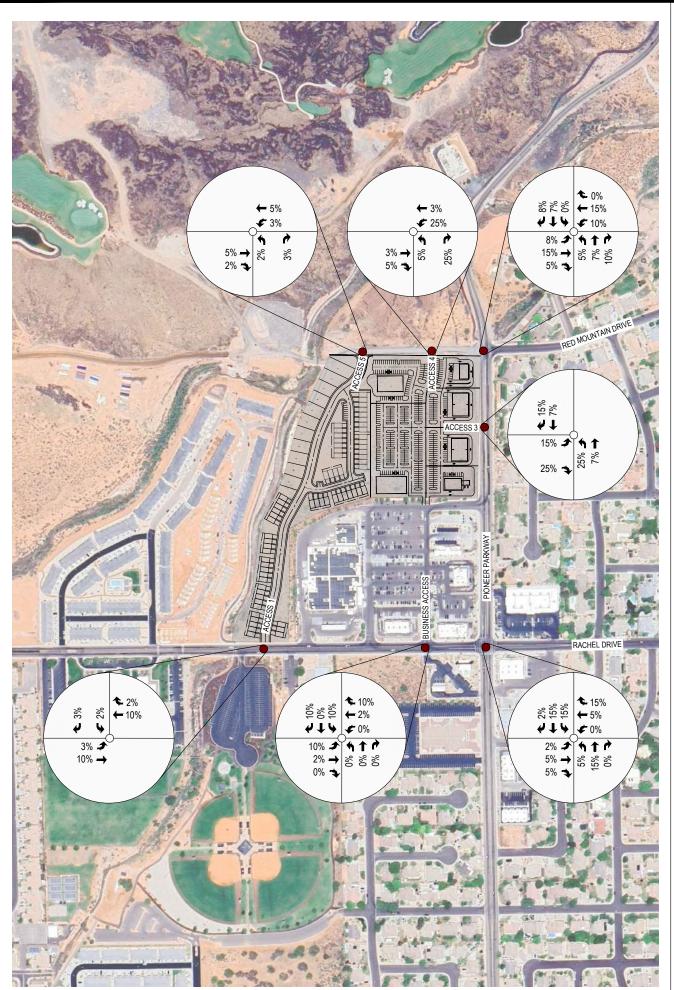


## 5.1 SITE TRAFFIC DISTRIBUTION

Site ingress/egress traffic at the proposed accesses were distributed based on the anticipated direction vehicles would be coming from or going to. Directional distribution was estimated based on current traffic patterns and current land uses within the proximity of the proposed development, primarily access to highways, employment districts, shopping area, schools, etc. Figure 6 illustrates the site traffic distribution percentages throughout the study area.

Using the distribution percentages along with the projected traffic volumes outlined in Table 1, Figure 7 illustrates the site traffic volumes anticipated at the study area intersections.

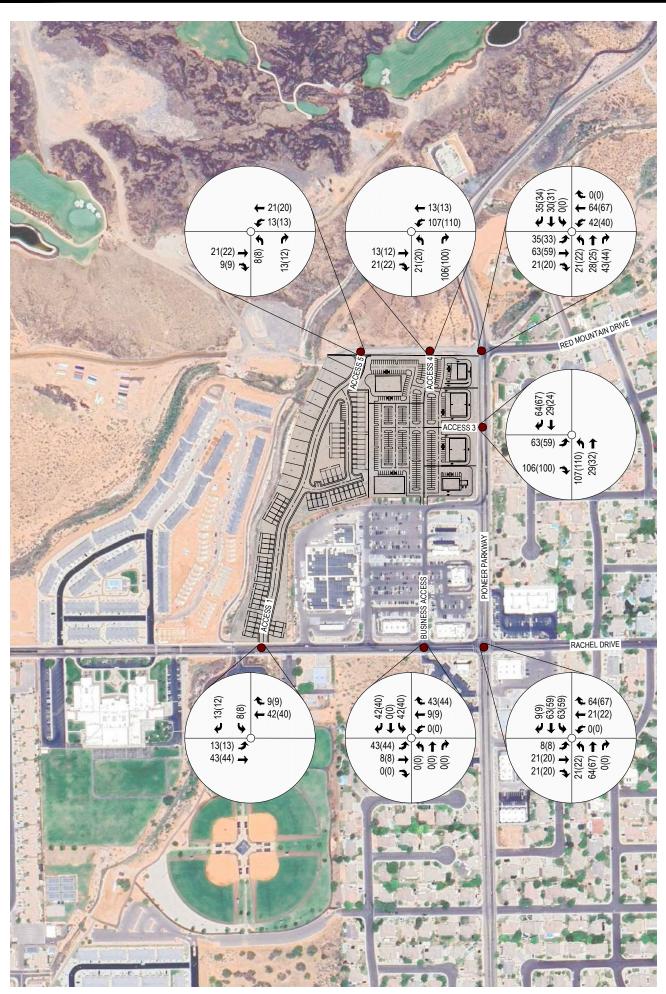




## SANTA CLARA MIXED USE FIGURE 6 - PROJECT DISTRIBUTION PERCENTAGES XX% = PEAK HOUR DISTRIBUTION PERCENTAGES









## SANTA CLARA MIXED USE FIGURE 7 - TRIP DISTRIBUTION VOLUMES XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

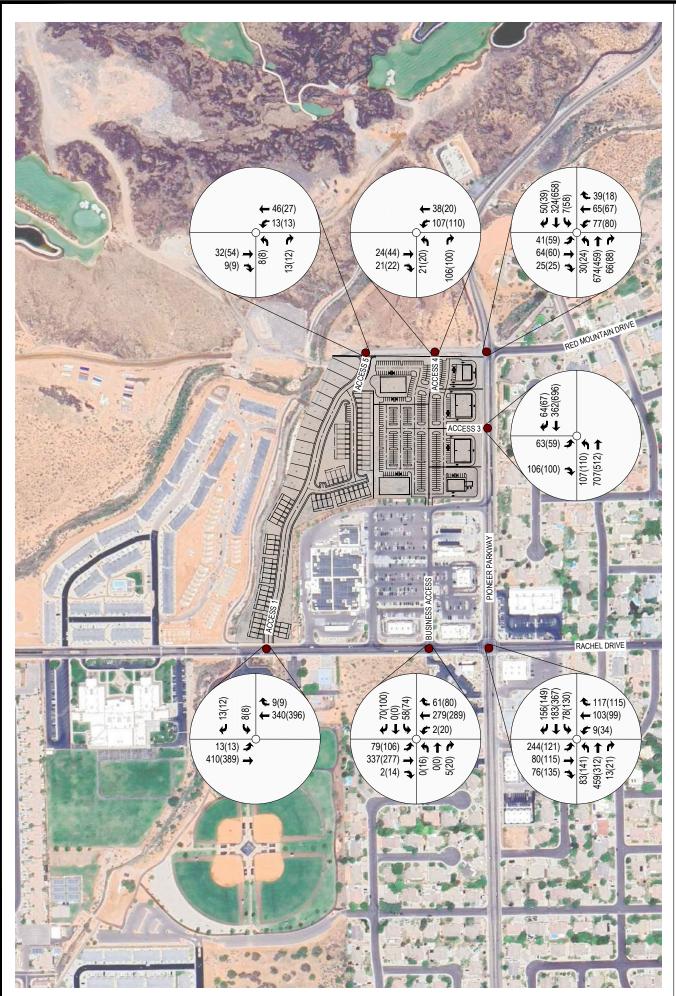


## 6.0 Opening and Future Year with Project Traffic Conditions

The 2028 Opening and 2033 Future Year scenarios with Project traffic volumes represent the traffic that will be added to the study area with the addition of the Santa Clara Mixed Use Development. Using the 2028 Opening Year traffic volumes (Figure 4) and the site generated traffic volumes (Figure 7), the 2028 Opening Year with Project traffic volumes are generated. Per the developer's schedule, it is anticipated Santa Clara Mixed Development will be built out in 2028. The 2028 Opening Year with Project traffic volumes, which illustrates the full build-out of the development, are illustrated in Figure 8.

Applying this same approach, using the 2033 Future Year traffic volumes (Figure 5) and the site generated traffic volumes (Figure 7), the 2033 Future Year with Project traffic volumes are generated. These volumes are found in Figure 9.

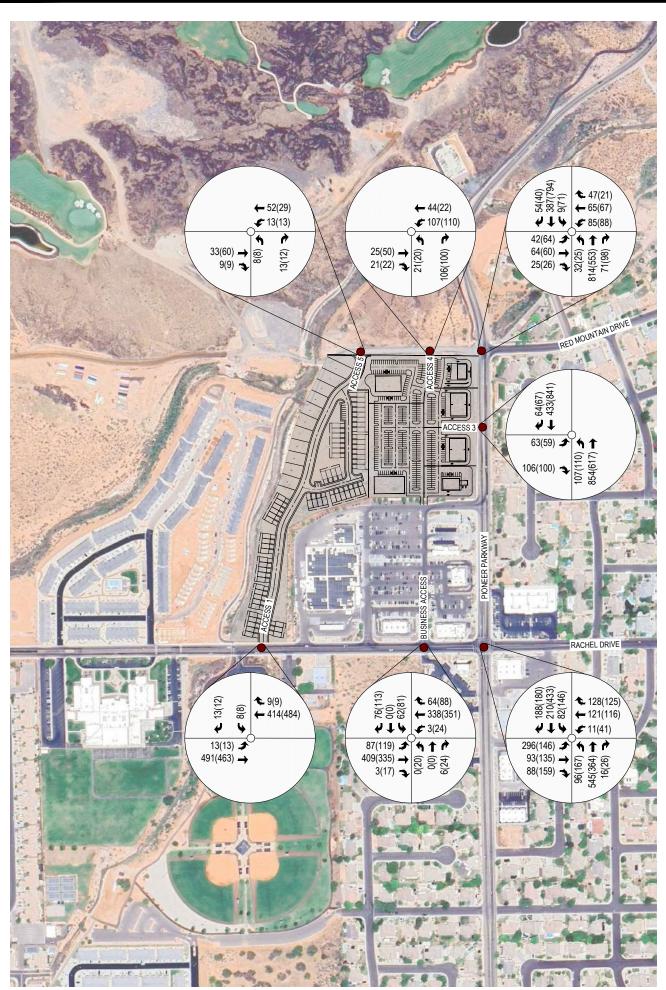












# SANTA CLARA MIXED USE FIGURE 9 - 2033 FUTURE YEAR W/ PROJECT TRAFFIC VOLUMES XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



## 7.0 Capacity Analysis

Intersection capacity analysis was performed at the study area intersections and the proposed accesses to the Santa Clara Mixed Use Development. Synchro® Version 11 was used to analyze the study intersections for the proposed trip conditions according to methods put forth by the Transportation Research Board's **Highway Capacity Manual** (**HCM 6**<sup>th</sup> **Edition**).

The Level of Service (LOS) of an intersection range from A to F, where LOS A has a low vehicular delay indicating smooth free-flowing traffic. LOS F has a high vehicular delay and indicates the worst-case scenario with high congestion and a complete breakdown of traffic flow. Although LOS A through C are the desired levels, LOS D is considered acceptable in urban conditions. Traffic conditions with LOS of E or F are generally deemed unacceptable and represent significant travel delay, increased accident potential, and inefficient motor vehicle operation. Table 2 shows the relation between LOS and vehicular delay for signalized and unsignalized intersections.

Table 2 - Signalized and Unsignalized intersection LOS and Delay Parameters

Level of Service (LOS)	Vehicular Delay (seconds/vehicle)				
Level of Service (LOS)	Signalized Intersection	Stop Controlled Approach			
Α	0.0 ≤10.0	0.0 < 10.0			
В	>10.0 ≤ 20.0	> 10.0 < 15.0			
С	> 20.0 <u>≤</u> 35.0	> 15.0 < 25.0			
D	> 35.0 <u>&lt;</u> 55.0	> 25.0 < 35.0			
E	> 55.0 <u>&lt;</u> 80.0	> 35.0 < 50.0			
F	> 80.0	> 50.0			

The 2024 Existing traffic volumes at the study area intersections were analyzed using Synchro. The levels of service at each of the turning movements can be seen in the following table.



Table 3 – 2024 Existing Traffic LOS

		202	4 Existing Traffic L	OS(Delay)		
Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound	
1: Rachel Drive 8	Business /	Access				
AM Peak Hour	-	A(0.1)	A(0.8)	B(10.0)	B(11.7)	
PM Peak Hour	-	A(0.5)	A(1.4)	B(13.5)	B(12.6)	
2: Rachel Drive 8	R Pioneer P	arkway				
AM Peak Hour	B(10.4)	A(5.9)	A(7.4)	B(13.8)	B(11.0)	
PM Peak Hour	B(10.3)	A(6.7)	A(7.3)	B(12.5)	B(11.6)	
3: Red Mountain Drive & Pioneer Parkway						
AM Peak Hour	B(18.0)	B(15.2)	B(16.0)	C(20.0)	B(14.5)	
PM Peak Hour	B(18.8)	B(14.6)	B(14.8)	B(18.5)	B(19.5)	

As can be seen in Table 3, under the existing traffic conditions, all movements at the study area intersections function with acceptable levels of service.

With the projected 4% growth through the 2028 opening year, the following table illustrates the LOS for the study area intersections.

Table 4 – 2028 Opening Year Traffic LOS

		2028 Opening Year Traffic LOS(Delay)						
Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound			
1: Rachel Drive 8	Business /	Access						
AM Peak Hour	-	A(0.1)	A(0.8)	B(10.3)	B(12.6)			
PM Peak Hour	-	A(0.5)	A(1.5)	C(15.2)	B(14.0)			
2: Rachel Drive 8	k Pioneer P	arkway						
AM Peak Hour	B(11.1)	A(6.8)	A(9.0)	B(14.2)	B(10.8)			
PM Peak Hour	B(10.7)	A(8.0)	A(8.9)	B(12.5)	B(11.3)			
3: Red Mountain Drive & Pioneer Parkway								
AM Peak Hour	B(19.8)	B(18.1)	B(18.9)	C(22.8)	B(14.0)			
PM Peak Hour	B(19.8)	B(17.2)	B(17.4)	B(18.3)	C(21.1)			

As can be seen in Table 4, under the 2028 Opening Year scenario, all intersections function with acceptable levels of service (LOS).



With the projected 4% growth through the Future Year of 2033, the following table illustrates the LOS for the study area intersections.

Table 5 - 2033 Future Year Traffic LOS

		2033 Future Year Traffic LOS(Delay)						
Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound			
1: Rachel Drive	& Business /	Access						
AM Peak Hour	-	A(0.1)	A(0.8)	B(10.9)	B(14.6)			
PM Peak Hour		A(0.5)	A(1.5)	C(19.5)	C(17.2)			
2: Rachel Drive	& Pioneer P	arkway						
AM Peak Hour	B(13.3)	A(8.3)	B(12.2)	B(17.2)	B(10.5)			
PM Peak Hour	B(11.6)	B(10.2)	B(11.7)	B(12.7)	B(11.1)			
3: Red Mountain Drive & Pioneer Parkway								
AM Peak Hour	C(25.6)	C(22.7)	C(23.5)	C(31.6)	B(13.4)			
PM Peak Hour	C(23.6)	C(21.6)	C(21.7)	B(18.5)	C(27.5)			

As seen in Table 5, under the 2033 Future Year scenario, the traffic movements and overall level of service continue to function with acceptable levels of service (LOS).

With the addition of the Santa Clara Mixed Use Development, the following table illustrates the projected levels of service at all intersections within the study area under the 2028 Opening Year with Project scenario, with the proposed improvements.



Table 6 – 2028 Opening Year w/ Project LOS

	2028 Opening Year w/ Project LOS(Delay)							
Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound			
1: Rachel Drive 8	& Business A	ccess						
AM Peak Hour	-	A(0.0)	A(1.6)	B(10.4)	C(16.8)			
PM Peak Hour	-	A(0.4)	A(2.3)	C(18.8)	C(20.0)			
2: Rachel Drive 8	k Pioneer Po	ırkway						
AM Peak Hour	B(12.7)	B(10.0)	B(13.7)	B(14.2)	B(11.2)			
PM Peak Hour	B(11.7)	B(10.5)	B(11.6)	B(12.7)	B(11.6)			
3: Red Mountain	Drive & Pio	neer Parkway						
AM Peak Hour	C(21.3)	C(21.4)	C(21.5)	C(24.2)	B(15.4)			
PM Peak Hour	C(21.5)	C(21.7)	C(21.6)	B(17.7)	C(24.3)			
4: Rachel Drive 8	Access 1							
AM Peak Hour	-	A(0.0)	A(0.2)	-	B(11.7)			
PM Peak Hour	-	A(0.0)	A(0.3)	-	B(12.1)			
5: Access 3 & Pic	oneer Expre	ss Parkway						
AM Peak Hour	-	-	C(16.1)	A(1.1)	A(0.0)			
PM Peak Hour	-	-	C(20.2)	A(1.8)	A(0.0)			
6: Red Mountain	Drive & Ac	cess 4						
AM Peak Hour	-	A(5.5)	A(0.0)	A(9.5)	-			
PM Peak Hour	-	A(6.4)	A(0.0)	A(9.6)	-			
7: Red Mountain	Drive & Ac	cess 5						
AM Peak Hour	-	A(1.6)	A(0.0)	A(8.8)	-			
PM Peak Hour	-	A(2.4)	A(0.0)	A(8.9)	-			

As can be seen in Table 6, all of the intersections are anticipated to continue to function with acceptable levels of service. The traffic entering the development at Access 3 meets the threshold for adding separate left and right turn lanes along Pioneer Parkway.

The following table illustrates the projected levels of service at all intersections within the study area under the 2033 Future Year with Project scenario, with the mitigations proposed under the 2028 Opening Year and 2033 Future Year scenarios (without project).



Table 7 – 2033 Future Year w/ Project LOS

	2033 Future Year w/ Project LOS(Delay)							
Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound			
1: Rachel Drive 8	Business A	ccess						
AM Peak Hour	-	A(0.1)	A(1.5)	B(10.9)	C(21.6)			
PM Peak Hour	-	A(0.4)	A(2.2)	D(26.0)	D(29.8)			
2: Rachel Drive 8	R Pioneer Po	ırkway						
AM Peak Hour	B(15.6)	B(11.3)	B(18.4)	B(18.1)	B(11.5)			
PM Peak Hour	B(13.1)	B(11.5)	B(13.2)	B(14.6)	B(12.7)			
3: Red Mountain	Drive & Pio	neer Parkway						
AM Peak Hour	C(28.8)	C(26.0)	C(26.0)	D(36.5)	B(15.2)			
PM Peak Hour	C(27.4)	C(26.3)	C(26.4)	B(18.7)	C(34.4)			
4: Rachel Drive 8	Access 1							
AM Peak Hour	-	A(0.0)	A(0.2)	-	B(12.4)			
PM Peak Hour	-	A(0.0)	A(0.2)	-	B(12.9)			
5: Access 3 & Pic	neer Expre	ss Parkway						
AM Peak Hour	-	-	C(18.7)	A(1.0)	A(0.0)			
PM Peak Hour	-	-	D(25.3)	A(1.7)	A(0.0)			
6: Red Mountain	Drive & Ac	cess 4						
AM Peak Hour	-	A(5.3)	A(0.0)	A(9.2)	-			
PM Peak Hour	-	A(6.3)	A(0.0)	A(9.3)	-			
7: Red Mountain	Drive & Aco	cess 5						
AM Peak Hour	-	A(1.5)	A(0.0)	A(8.8)	-			
PM Peak Hour	-	A(2.3)	A(0.0)	A(8.9)	-			

As can be seen in Table 7, all of the intersections are anticipated to continue to function with acceptable levels of service.



## 8.0 Recommendations

Based on the information and findings presented in this report, the following recommendations are proposed under the different study scenarios.

## 2024 Existing Scenario

Under the existing conditions, all the study area intersections function with an acceptable level of service (LOS) C or better.

## 2028 Opening Year Scenario

With the projected growth within this study area for the Santa Clara Mixed Use Development, all the study area intersections will continue to function at acceptable levels of service.

## 2028 Opening Year w/ Project Scenario

With the full build-out of the Santa Clara Mixed Use Development by 2028, all intersections within the study area are anticipated to continue to function at acceptable levels of service (LOS).

Access 3 is planned to be constructed along Pioneer Parkway. The traffic entering the development meets the threshold for adding separate left and right turn lanes along Pioneer Parkway.

## 2033 Future Year Scenario

Under the 2033 Future Year scenario, it is anticipated all intersections within this study will continue to function with acceptable levels of service.

## 2033 Future Year w/Project Scenario

Under the 2033 Future Year with Project scenario, all intersections will function with acceptable levels of service (LOS).



## **Appendix**



## **Existing Traffic Counts**

## TURNING MOVEMENT COUNT SUMMARY

AM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

## TOTAL VOLUMES 499 572 607 502 428 VOLUMES NORTH 24 4.0% 0 0.0% 14 2.3% 223 160 92 209 132 86 Total= ď 16 24 21 20 WESTBOUND WESTBOUND 5.1% **15** 2.5% સ 15 Rachel Drive 46.6% **232** 38.2% 283 $\alpha$ SOUTHBOUND SOUTHBOUND 0.3% **2** 0.3% 102 88 41 52 54 237 269 283 235 188 98 8 16 22 31 33 **0 0** 0.0% **4** 0.7% 2 $\alpha$ EASTBOUND EASTBOUND 0.68 209 **Business Access** 7:30 AM 8:30 AM Ö 0 PK HR VOLUME: PEAK HOUR: FROM: ď 13 15 17 $\alpha$ PHF: NORTHBOUND NORTHBOUND 209 234 232 8 100 100 33 40 21 23 Rachel Drive and Business Acces **Business Access** Rachel Drive 24-0446 12-Dec-24 7:00 AM 9:00 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM Ö TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: FROM: 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM COUNT TIME: FROM: E-W STREET: N-S STREET:

\*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

## TURNING MOVEMENT COUNT SUMMARY

PM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

## TOTAL TOTAL NORTH **51** 7.3% 0.0% 29 4.2% 694 129 172 192 156 580 634 661 694 633 14 Total= 3 ď 53 49 51 42 WESTBOUND WESTBOUND **53** 7.6% 4.5% 27 29 35 27 સ 3 3 240 34.6% Rachel Drive 33.1% 230 12 ď $\alpha$ 9 SOUTHBOUND SOUTHBOUND **12** 1.7% 2.4% 175 204 217 230 32 8 12 18 18 18 16 16 46 52 51 53 48 **14** 2.0% **0 17** 2.4% ď 0 4 4 17 $\alpha$ EASTBOUND EASTBOUND 694 Business Access 5:45 PM Ö 13 4 PK HR VOLUME: PEAK HOUR: FROM: 4:45 PM 39 31 28 28 $\alpha$ 2 4 12 $\alpha$ PHF: NORTHBOUND NORTHBOUND \*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR. 174 240 32 34 66 66 67 67 Rachel Drive and Business Acces 16 **Business Access** Rachel Drive 24-0446 12-Dec-24 4:00 PM 6:00 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:15 PM 4:30 PM 6:00 PM ë TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM FROM: 4:00 PM 4:15 PM COUNT TIME: FROM: FROM: E-W STREET: N-S STREET: NOTES:

AM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

### TOTAL VOLUMES 912 1,062 1,068 975 VOLUMES NORTH 126 11.8% 103 9.6% 1.2% 1,068 122 238 322 230 272 244 Total= 163 126 82 80 22 28 28 27 28 27 2 WESTBOUND WESTBOUND 12 22 34 34 34 75 88 103 35 **202** 18.9% **4.**2% 13 Rachel Drive 4.8% **70** 6.6% 3 36 8 53 8 8 5 5 10 SOUTHBOUND SOUTHBOUND **48** 4.5% **8** 0.7% 4 6 5 185 221 202 174 74 43 32 46 21 53 5.0% 338 31.6% 11 1.0% ď 2 EASTBOUND EASTBOUND 0.83 1,068 232 297 338 41 75 78 106 Pioneer Parkway 8:30 AM Ö 12 12 12 4 53 53 50 49 1 PK HR VOLUME: PEAK HOUR: 7:30 AM FROM: 43 16 2 $\alpha$ 9 12 41 9 PHF: NORTHBOUND NORTHBOUND 22 22 2 22 Rachel Drive and Pioneer Parkway Pioneer Parkway Rachel Drive 24-0446 12-Dec-24 7:00 AM 9:00 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM Ö TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM FROM: 7:00 AM 7:15 AM 7:30 AM 7:45 AM COUNT TIME: FROM: E-W STREET: N-S STREET:

953

124

16

15

41 47

156

15

45

22 59

\*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

8:00 AM

340 322

PM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

### TOTAL TOTAL NORTH **120** 10.1% **263** 22.2% 1185 1,109 1,099 1,137 **61** 5.1% 276 259 300 264 314 263 Total= 118 34 32 38 35 38 38 38 38 38 ď WESTBOUND WESTBOUND 236 232 251 99 **41** 3.5% 8.2% 97 7 201208 10 62 63 Rachel Drive 8.9% **99** 5.6% 2 2 2 2 3 3 4 3 4 3 8 8 8 8 8 $\alpha$ 9 $\alpha$ SOUTHBOUND SOUTHBOUND **29** 2.4% 8.3% 8 4 4 19 24 21 73 93 93 23 29 102 8.6% 209 17.6% **18** 1.5% 25 20 18 16 ď ď 27 EASTBOUND EASTBOUND 0.94 1,185 192 204 199 48 37 37 37 37 37 Pioneer Parkway 5:45 PM Ö 12 15 27 27 27 78 90 20 PK HR VOLUME: PEAK HOUR: FROM: 4:45 PM 3 42 42 41 $\alpha$ Ξ 12 6 13 10 $\alpha$ P.H.: NORTHBOUND NORTHBOUND 16 9 2 2 2 3 6 13 Rachel Drive and Pioneer Parkway Rachel Drive Pioneer Parkway 24-0446 12-Dec-24 4:00 PM 6:00 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:15 PM 4:30 PM ë TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM FROM: 4:00 PM 4:15 PM COUNT TIME: FROM: FROM: E-W STREET: N-S STREET: NOTES:

1,185 1,148

120

263

62

8 75

6

103

209

102

38

99 56

29

\*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

6:00 PM

5:00 PM

AM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

### TOTAL VOLUMES 811 923 922 866 VOLUMES 129 NORTH 13 1.4% 251 27.2% **6** 0.7% 201 253 228 241 923 200 186 197 Total= 2 14 WESTBOUND WESTBOUND 34 47 47 62 237 251 227 223 233 99 **5** 0.5% **33** 3.6% Red Mountain Drive 0.1% 0.1% $\alpha$ SOUTHBOUND SOUTHBOUND 0.3% **30** 3.3% က 8 0.9% **552** 59.8% **20** 2.2% R 2 2 2 8 8 $\alpha$ EASTBOUND EASTBOUND 923 0.91 77 84 159 149 160 469 552 585 534 108 Pioneer Parkway 8:15 AM Ö PK HR VOLUME: PEAK HOUR: 7:15 AM FROM: ď 33 33 33 $\alpha$ 9 10 PHF: NORTHBOUND NORTHBOUND Mountain Drive and Pioneer Park 25 30 25 25 **Red Mountain Drive** Pioneer Parkway 24-0446 12-Dec-24 7:00 AM 9:00 AM 8:15 AM 8:30 AM 8:45 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:00 AM Ö TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM FROM: 7:00 AM 7:15 AM 7:30 AM 7:45 AM COUNT TIME: FROM: E-W STREET: N-S STREET: NOTES:

824

486

\*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

9:00 AM

8:00 AM

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PM PEAK HOUR VOLUMES

FOCUS ENGINEERING & SURVEYING, LLC

### TOTAL TOTAL NORTH 536 49.8% 50 4.6% 938 960 1,037 1,074 1,077 **4** 0.4% 1077 239 237 253 308 308 276 240 231 Total= $\alpha$ WESTBOUND WESTBOUND 474 492 525 543 124 124 124 157 141 **22** 2.0% 1.4% 3.2% 0.0% Red Mountain Drive 19 0.1% ď $\alpha$ SOUTHBOUND SOUTHBOUND 0.4% 19 26 31 2 0.2% **371** 34.4% **38** 3.5% œ 24 36 37 38 $\alpha$ 12 EASTBOUND EASTBOUND 0.87 1,077 339 324 340 82 Pioneer Parkway 6:00 PM Ö PK HR VOLUME: PEAK HOUR: FROM: 5:00 PM 6:0 ď 22 22 13 23 $\alpha$ PHF: NORTHBOUND NORTHBOUND Mountain Drive and Pioneer Park 26 Red Mountain Drive Pioneer Parkway 24-0446 12-Dec-24 4:00 PM 6:00 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 4:15 PM 4:30 PM ë TIME PERIOD TIME PERIOD COUNT DATA INPUT: FOCUS PROJ. NO.: COUNT DATE: HOURLY TOTALS: INTERSECTION: 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM FROM: 4:00 PM 4:15 PM COUNT TIME: FROM: FROM: E-W STREET: N-S STREET: NOTES:

536

27 22

358

15

33

\*NOTE\* PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

6:00 PM



# **Trip Generation Reports**

# Single-Family Detached Housing

(210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

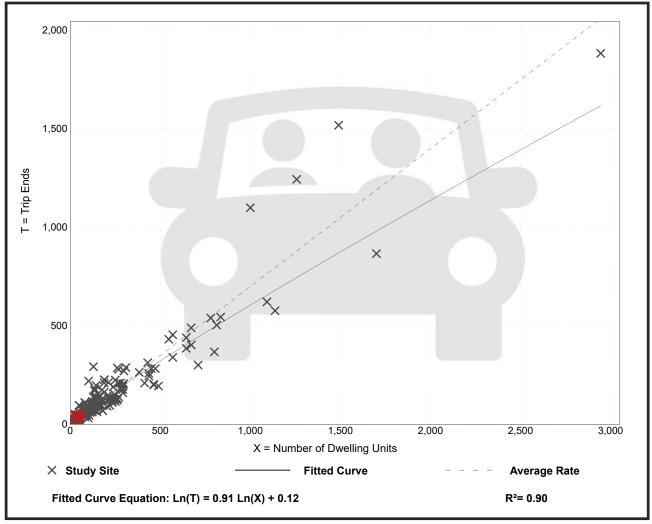
Number of Studies: 192 Avg. Num. of Dwelling Units: 226

Directional Distribution: 25% entering, 75% exiting

# **Vehicle Trip Generation per Dwelling Unit**

	<del>_</del>	
Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

# **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# **Single-Family Detached Housing**

(210)

Vehicle Trip Ends vs: **Dwelling Units** 

> On a: Weekday,

> > Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

General Urban/Suburban Setting/Location:

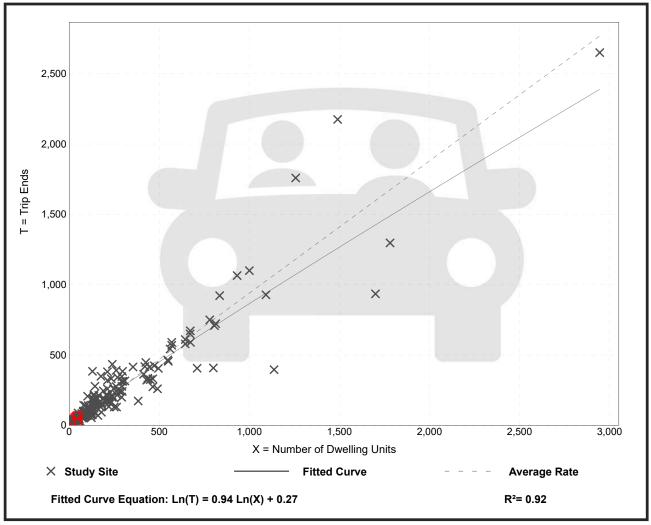
Number of Studies: 208 Avg. Num. of Dwelling Units: 248

Directional Distribution: 63% entering, 37% exiting

# **Vehicle Trip Generation per Dwelling Unit**

	<del>_</del>	
Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

## **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

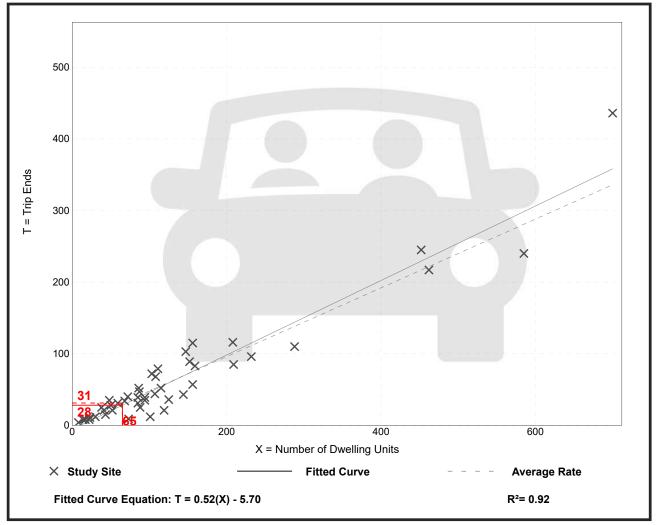
Number of Studies: 46 Avg. Num. of Dwelling Units: 135

Directional Distribution: 25% entering, 75% exiting

# **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

# **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

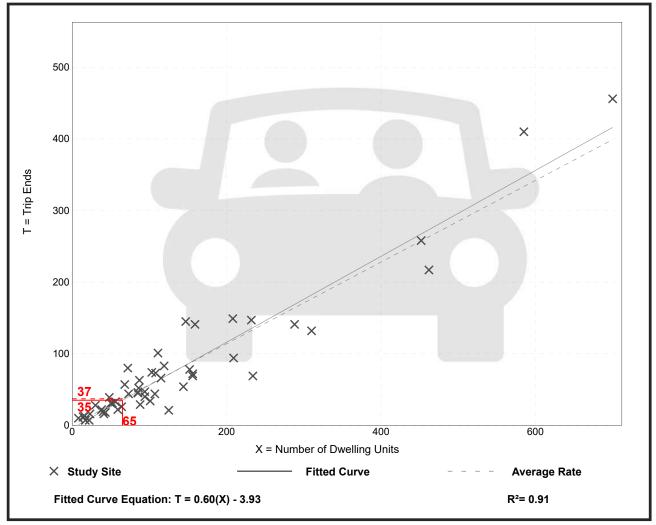
Number of Studies: 51 Avg. Num. of Dwelling Units: 136

Directional Distribution: 59% entering, 41% exiting

## **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

# **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# Strip Retail Plaza (<40k)

(822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 5 Avg. 1000 Sq. Ft. GLA: 18

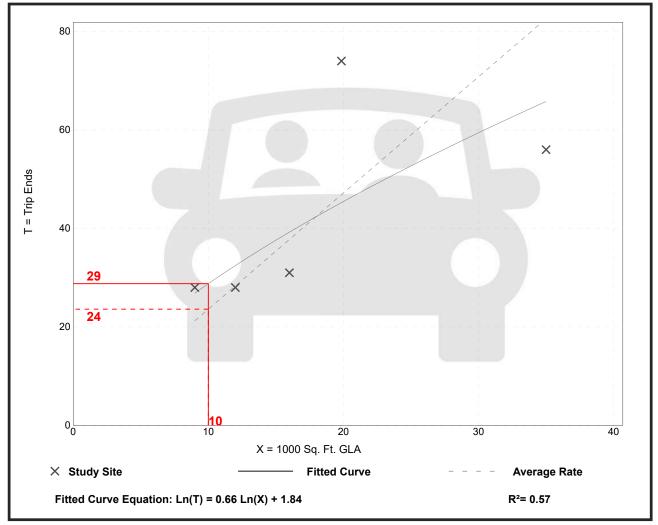
Directional Distribution: 60% entering, 40% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

## **Data Plot and Equation**

### Caution - Small Sample Size



Trip Gen Manual, 11th Edition

# Strip Retail Plaza (<40k)

(822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

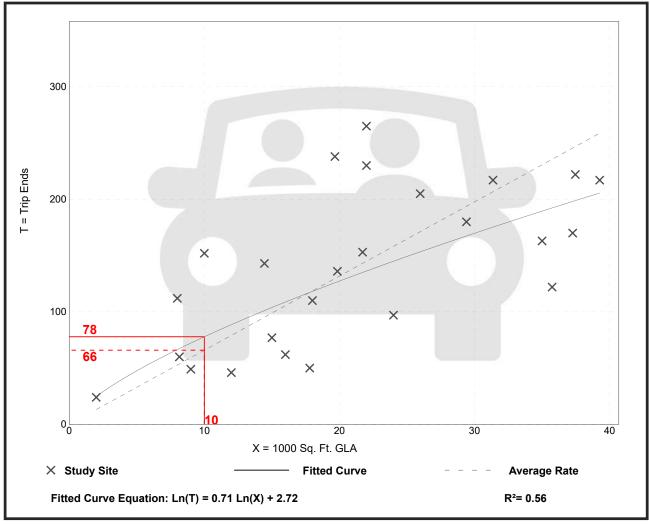
Number of Studies: 25 Avg. 1000 Sq. Ft. GLA: 21

Directional Distribution: 50% entering, 50% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation	
6.59	2.81 - 15.20	2.94	

## **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# **Drive-in Bank**

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

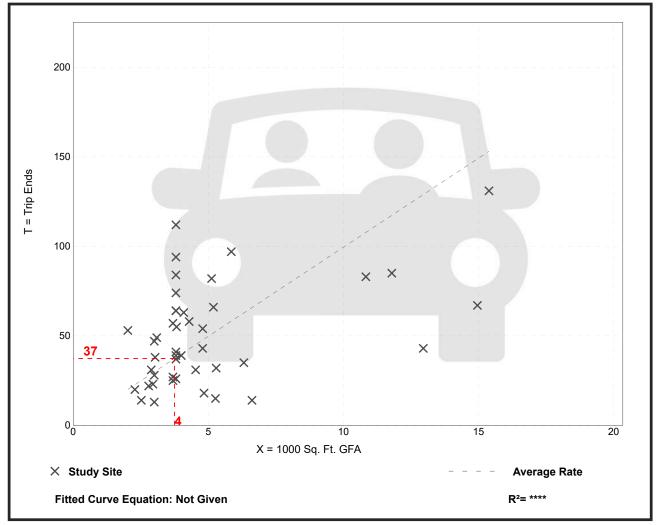
Number of Studies: 44 Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 58% entering, 42% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.95	2.12 - 29.47	6.00

# **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# **Drive-in Bank**

(912)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

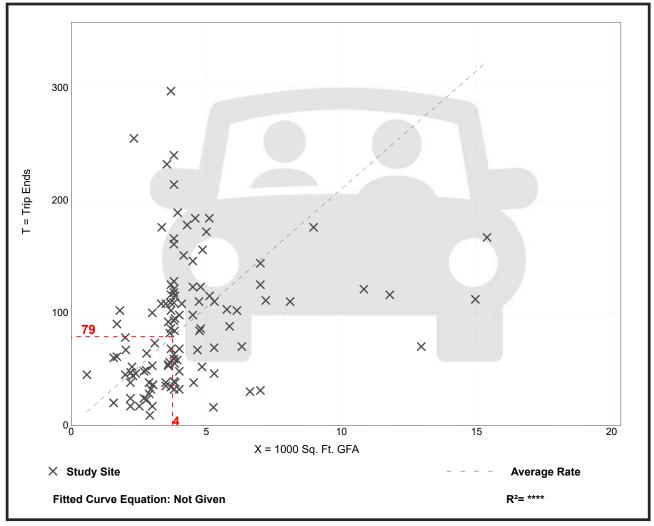
Number of Studies: 114 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 50% entering, 50% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
21.01	3.04 - 109.91	15.13

# **Data Plot and Equation**



Trip Gen Manual, 11th Edition

# **Fast Casual Restaurant**

(930)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 1 Avg. 1000 Sq. Ft. GFA: 1

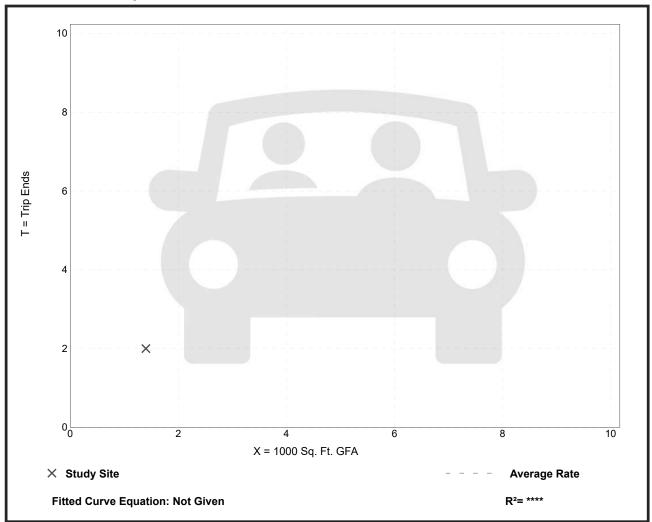
Directional Distribution: 50% entering, 50% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

	-	
Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	*

## **Data Plot and Equation**

### Caution - Small Sample Size



Trip Gen Manual, 11th Edition

# **Fast Casual Restaurant**

(930)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

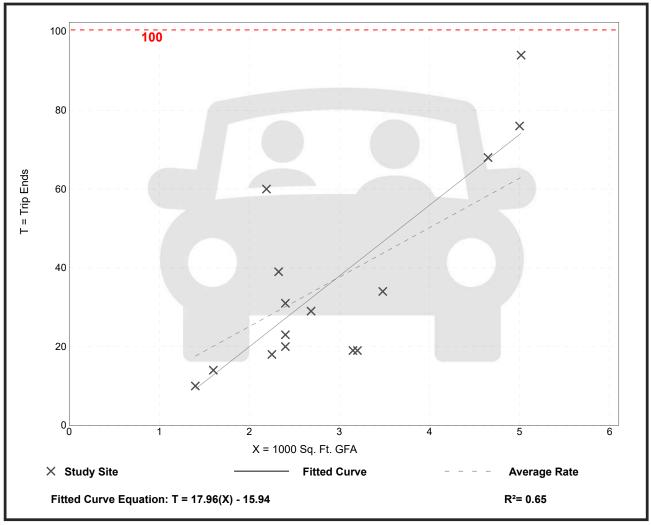
Number of Studies: 15 Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 55% entering, 45% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

	-	
Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

## **Data Plot and Equation**



Trip Gen Manual, 11th Edition

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

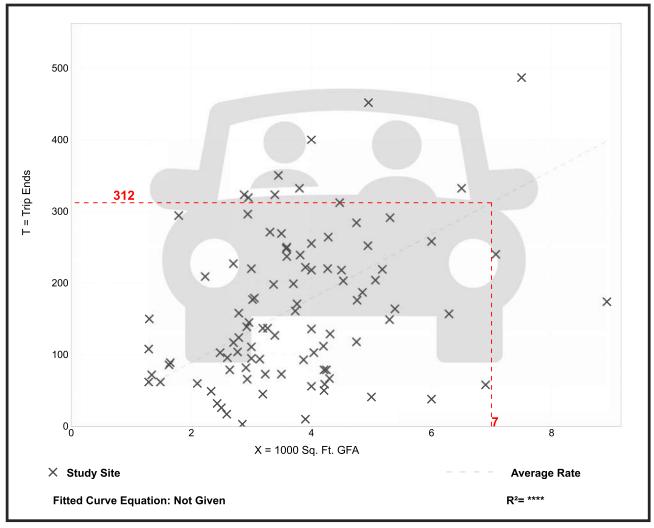
Setting/Location: General Urban/Suburban

Number of Studies: 96 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14



Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

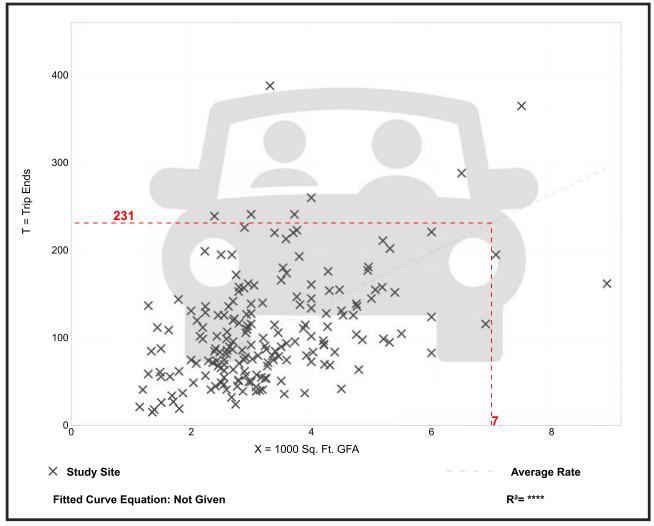
Setting/Location: General Urban/Suburban

Number of Studies: 190 Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

### Vehicle Trip Generation per 1000 Sq. Ft. GFA

·	-	
Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59



Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

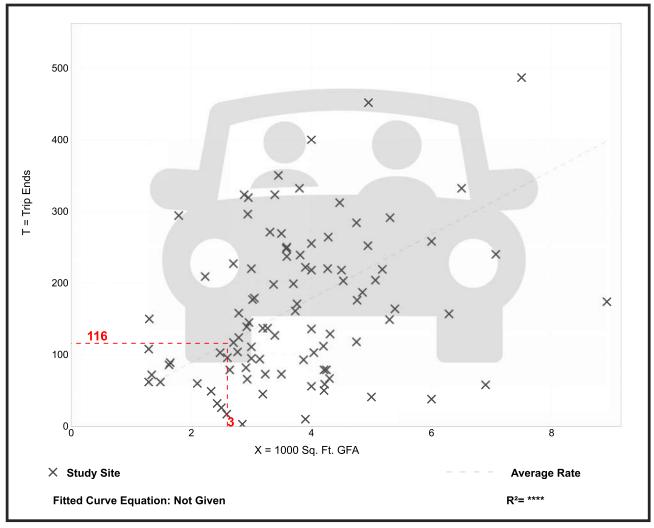
Setting/Location: General Urban/Suburban

Number of Studies: 96 Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14



Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

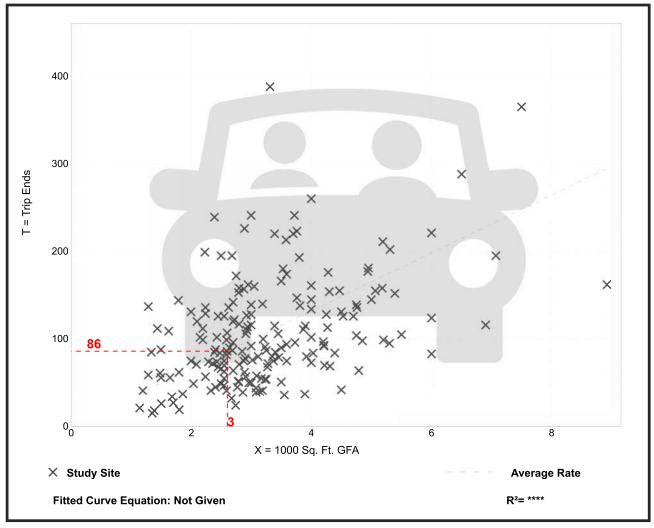
Setting/Location: General Urban/Suburban

Number of Studies: 190 Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

# Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59





# **Traffic Analysis Reports**



# 2024 Existing Traffic Analysis

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ		7	ሻ	ĵ.		*	f.	
Traffic Vol, veh/h	0	0	4	14	0	24	2	232	15	31	283	2
Future Vol, veh/h	0	0	4	14	0	24	2	232	15	31	283	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	15	0	26	2	252	16	34	308	2
Major/Minor I	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	654	649	309	643	_	260	310	0	0	268	0	0
Stage 1	377	377	-	264	_		-	-	-		-	-
Stage 2	277	272	-	379	_	-	-	_	_	_	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	_	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	_	-	_	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	_	_	-	-	-	-	_
Follow-up Hdwy	3.518	4.018	3.318		-	3.318	2.218	-	_	2.218	-	-
Pot Cap-1 Maneuver	380	389	731	386	0	779	1250	-	-	1296	-	-
Stage 1	644	616	-	741	0	-	-	-	-	-	-	-
Stage 2	729	685	-	643	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	359	378	731	376	-	779	1250	-	-	1296	-	-
Mov Cap-2 Maneuver	359	378	-	376	-	-	-	-	-	-	-	-
Stage 1	643	600	-	740	-	_	_	-	-	-	-	-
Stage 2	703	684	-	622	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10			11.7			0.1			0.8		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NRR I	FBI n1V	VBLn1V	VBI n2	SBL	SBT	SBR		
Capacity (veh/h)		1250	-	-	731	376	779	1296	-			
HCM Lane V/C Ratio		0.002	-		0.006		0.033		<u>-</u>	-		
HCM Control Delay (s)		7.9	-	-	10	15	9.8	7.9		-		
HCM Lane LOS		7.9 A	_	_	В	C	9.0 A	7.9 A	<u> </u>	-		
HCM 95th %tile Q(veh)	)	0		_	0	0.1	0.1	0.1	_			
		- 0	_		- 0	0.1	0.1	0.1	_			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	ĵ∍		7	<b>•</b>	7	7	₽		ሻ	₽	
Traffic Volume (veh/h)	53	338	11	13	103	126	8	70	45	202	51	48
Future Volume (veh/h)	53	338	11	13	103	126	8	70	45	202	51	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	367	12	14	112	137	9	76	49	220	55	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	458	506	17	289	525	445	764	509	328	748	424	401
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1131	1801	59	1004	1870	1585	1287	1062	685	1266	884	836
Grp Volume(v), veh/h	58	0	379	14	112	137	9	0	125	220	0	107
Grp Sat Flow(s),veh/h/ln	1131	0	1860	1004	1870	1585	1287	0	1747	1266	0	1720
Q Serve(g_s), s	1.6	0.0	6.9	0.5	1.7	2.6	0.1	0.0	1.5	4.4	0.0	1.3
Cycle Q Clear(g_c), s	3.3	0.0	6.9	7.4	1.7	2.6	1.4	0.0	1.5	5.9	0.0	1.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00	_	0.39	1.00	_	0.49
Lane Grp Cap(c), veh/h	458	0	522	289	525	445	764	0	838	748	0	824
V/C Ratio(X)	0.13	0.00	0.73	0.05	0.21	0.31	0.01	0.00	0.15	0.29	0.00	0.13
Avail Cap(c_a), veh/h	682	0	892	488	897	760	764	0	838	748	0	824
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	12.2	15.5	10.3	10.6	5.8	0.0	5.5	7.1	0.0	5.4
Incr Delay (d2), s/veh	0.1	0.0	1.9	0.1	0.2	0.4	0.0	0.0	0.4	1.0	0.0	0.3
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	0.3	0.0	2.4	0.1	0.6	0.7	0.0	0.0	0.5	1.1	0.0	0.4
Unsig. Movement Delay, s/veh		0.0	444	45.0	40 F	44.0	<b></b>	0.0	<b>5</b> 0	0.4	0.0	г 0
LnGrp Delay(d),s/veh	11.7	0.0	14.1	15.6	10.5	11.0	5.9	0.0	5.9	8.1	0.0	5.8
LnGrp LOS	В	A 407	В	В	В	В	A	A 424	A	A	A 207	A
Approach Vol, veh/h		437			263			134			327	
Approach Delay, s/veh		13.8			11.0			5.9			7.4	
Approach LOS		В			В			А			А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		15.0		22.5		15.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		3.5		8.9		7.9		9.4				
Green Ext Time (p_c), s		0.6		1.6		1.0		0.7				
Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			В									

	٠	<b>→</b>	•	•	<b>←</b>	•	•	†	<b>/</b>	<b>/</b>	ļ	✓	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ķ	<b>†</b>	7	ķ	<b>†</b>	7	ľ	Ĥ		ķ	<b>†</b>	7	
Traffic Volume (veh/h)	8	552	20	6	251	13	30	1	33	5	1	3	
Future Volume (veh/h)	8	552	20	6	251	13	30	1	33	5	1	3	
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 Approac	h	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	9	600	22	7	273	14	33	1	36	5	1	3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	436	720	610	205	715	606	583	14	492	522	542	459	
Arrive On Green	0.01	0.38	0.38	0.01	0.38	0.38	0.03	0.32	0.32	0.01	0.29	0.29	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	43	1549	1781	1870	1585	
Grp Volume(v), veh/h	9	600	22	7	273	14	33	0	37	5	1	3	
Grp Sat Flow(s),veh/h/lr	1781	1870	1585	1781	1870	1585	1781	0	1592	1781	1870	1585	
Q Serve(g_s), s	0.2	18.6	0.6	0.2	6.7	0.4	0.8	0.0	1.0	0.1	0.0	0.1	
Cycle Q Clear(g_c), s	0.2	18.6	0.6	0.2	6.7	0.4	0.8	0.0	1.0	0.1	0.0	0.1	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00	
Lane Grp Cap(c), veh/h	436	720	610	205	715	606	583	0	506	522	542	459	
V/C Ratio(X)	0.02	0.83	0.04	0.03	0.38	0.02	0.06	0.00	0.07	0.01	0.00	0.01	
Avail Cap(c_a), veh/h	555	1256	1064	328	1256	1064	661	0	506	649	542	459	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	12.1	17.8	12.3	14.5	14.3	12.3	14.9	0.0	15.2	15.9	16.1	16.2	
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.1	0.3	0.0	0.0	0.0	0.3	0.0	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		7.4	0.2	0.1	2.6	0.1	0.3	0.0	0.4	0.1	0.0	0.0	
Unsig. Movement Delay													
LnGrp Delay(d),s/veh	12.2	20.4	12.3	14.6	14.6	12.3	14.9	0.0	15.5	15.9	16.1	16.2	
LnGrp LOS	В	С	В	В	В	В	В	Α	В	В	В	В	
Approach Vol, veh/h		631			294			70			9		
Approach Delay, s/veh		20.0			14.5			15.2			16.0		
Approach LOS		С			В			В			В		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc)	s4 9	24.8	5.1	29.1	6.7	23.0	5.2	28.9					
Change Period (Y+Rc),	-	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gm		18.5	5.0	42.9	5.0	18.5	5.0	42.9					
Max Q Clear Time (g_c-	, .	3.0	2.2	20.6	2.8	2.1	2.2	8.7					
Green Ext Time (p_c), s		0.1	0.0	4.0	0.0	0.0	0.0	1.7					
Intersection Summary		J.,	3.0		3.3	3.0	3.0						
HCM 6th Ctrl Delay			18.0										
			16.0 B										
HCM 6th LOS			В										

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		*		7	ሻ	- ↑		ሻ	1	
Traffic Vol, veh/h	14	0	17	29	0	51	17	240	31	53	230	12
Future Vol, veh/h	14	0	17	29	0	51	17	240	31	53	230	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	0	18	32	0	55	18	261	34	58	250	13
Major/Minor I	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	715	704	257	696	-	278	263	0	0	295	0	0
Stage 1	373	373	-	314	-	-	-	-	-	-	-	-
Stage 2	342	331	-	382	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	346	361	782	356	0	761	1301	-	-	1266	-	-
Stage 1	648	618	-	697	0	-	-	-	-	-	-	-
Stage 2	673	645	-	640	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	306	340	782	332	-	761	1301	-	-	1266	-	-
Mov Cap-2 Maneuver	306	340	-	332	-	-	-	-	-	-	-	-
Stage 1	639	590	-	687	-	-	-	-	-	-	-	-
Stage 2	615	636	-	596	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	13.5			12.6			0.5			1.4		
HCM LOS	В			В								
Minor Lane/Major Mvm	ıt	NBL	NBT	NBR I	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1301	-	-		332	761	1266	-	-		
HCM Lane V/C Ratio		0.014	-	-		0.095			-	-		
HCM Control Delay (s)		7.8	-	-	13.5	17	10.1	8	-	-		
HCM Lane LOS		Α	-	-	В	С	В	A	-	-		
HCM 95th %tile Q(veh)	)	0	-	-	0.2	0.3	0.2	0.1	-	-		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	₽		ሻ	<b>↑</b>	7	ሻ	₽		ሻ	₽	
Traffic Volume (veh/h)	102	209	18	61	263	120	29	66	41	97	81	98
Future Volume (veh/h)	102	209	18	61	263	120	29	66	41	97	81	98
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	227	20	66	286	130	32	72	45	105	88	107
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	523	46	413	578	490	649	496	310	723	354	430
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	970	1694	149	1133	1870	1585	1188	1076	673	1275	768	934
Grp Volume(v), veh/h	111	0	247	66	286	130	32	0	117	105	0	195
Grp Sat Flow(s),veh/h/ln	970	0	1843	1133	1870	1585	1188	0	1749	1275	0	1702
Q Serve(g_s), s	4.1	0.0	4.2	1.9	4.9	2.4	0.7	0.0	1.5	2.0	0.0	2.7
Cycle Q Clear(g_c), s	9.0	0.0	4.2	6.1	4.9	2.4	3.4	0.0	1.5	3.5	0.0	2.7
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.38	1.00		0.55
Lane Grp Cap(c), veh/h	363	0	569	413	578	490	649	0	806	723	0	784
V/C Ratio(X)	0.31	0.00	0.43	0.16	0.50	0.27	0.05	0.00	0.15	0.15	0.00	0.25
Avail Cap(c_a), veh/h	510	0	849	585	862	730	649	0	806	723	0	784
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	10.8	13.2	11.0	10.2	7.4	0.0	6.1	7.1	0.0	6.4
Incr Delay (d2), s/veh	0.5	0.0	0.5	0.2	0.7	0.3	0.1	0.0	0.4	0.4	0.0	0.8
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	8.0	0.0	1.3	0.4	1.6	0.7	0.2	0.0	0.5	0.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	11.3	13.4	11.7	10.5	7.6	0.0	6.5	7.5	0.0	7.2
LnGrp LOS	В	Α	В	В	В	В	Α	Α	Α	Α	Α	A
Approach Vol, veh/h		358			482			149			300	
Approach Delay, s/veh		12.5			11.6			6.7			7.3	
Approach LOS		В			В			Α			Α	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		16.6		22.5		16.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		5.4		11.0		5.5		8.1				
Green Ext Time (p_c), s		0.5		1.1		1.2		1.7				
Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			В									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ķ		7	¥		7	¥	ĥ		Ť		7	
Traffic Volume (veh/h)	2	371	38	50	536	4	34	0	15	22	1	4	
Future Volume (veh/h)	2	371	38	50	536	4	34	0	15	22	1	4	
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 Approacl	า	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	2	403	41	54	583	4	37	0	16	24	1	4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	199	619	525	342	705	598	596	0	481	573	548	464	
Arrive On Green	0.00	0.33	0.33	0.05	0.38	0.38	0.04	0.00	0.30	0.03	0.29	0.29	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Grp Volume(v), veh/h	2	403	41	54	583	4	37	0	16	24	1	4	
Grp Sat Flow(s),veh/h/ln		1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Q Serve(g_s), s	0.0	11.4	1.1	1.2	17.5	0.1	0.9	0.0	0.4	0.6	0.0	0.1	
Cycle Q Clear(g_c), s	0.0	11.4	1.1	1.2	17.5	0.1	0.9	0.0	0.4	0.6	0.0	0.1	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h		619	525	342	705	598	596	0	481	573	548	464	
V/C Ratio(X)	0.01	0.65	0.08	0.16	0.83	0.01	0.06	0.00	0.03	0.04	0.00	0.01	
Avail Cap(c_a), veh/h	338	1315	1114	398	1315	1114	675	0	481	671	548	464	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh		17.7	14.3	13.3	17.5	12.1	14.2	0.0	15.2	14.6	15.6	15.6	
Incr Delay (d2), s/veh	0.0	1.2	0.1	0.2	2.5	0.0	0.0	0.0	0.1	0.0	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	
%ile BackOfQ(50%),veh		4.5	0.4	0.4	7.0	0.0	0.3	0.0	0.2	0.2	0.0	0.0	
Unsig. Movement Delay													
LnGrp Delay(d),s/veh	15.6	18.9	14.3	13.5	20.1	12.1	14.3	0.0	15.4	14.6	15.6	15.6	
LnGrp LOS	В	В	В	В	С	В	В	A	В	В	В	В	
Approach Vol, veh/h		446			641			53			29		
Approach Delay, s/veh		18.5			19.5			14.6			14.8		
Approach LOS		В			В			В			В		
	1		2	1		6	7						
Timer - Assigned Phs	-6.0	2	3	<u>4</u>	5	6	7	8					
Phs Duration (G+Y+Rc)		23.4	7.5	25.1	6.9	22.7	4.7	27.9					
Change Period (Y+Rc),		4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gma		18.2	5.0	43.7	5.1	18.2	5.0	43.7					
Max Q Clear Time (g_c+		2.4	3.2	13.4	2.9	2.1	2.0	19.5					
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	3.9					
Intersection Summary													
HCM 6th Ctrl Delay			18.8										
HCM 6th LOS			В										



# 2028 Opening Year Traffic Analysis

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች		7	ሻ	<b>1</b>		ች	ĵ.	
Traffic Vol, veh/h	0	0	5	16	0	28	2	271	18	36	331	2
Future Vol, veh/h	0	0	5	16	0	28	2	271	18	36	331	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	17	0	30	2	295	20	39	360	2
Major/Minor	Minor2			Minor1			Major1		I	Major2		
Conflicting Flow All	763	758	361	751	-	305	362	0	0	315	0	0
Stage 1	439	439	-	309	-	-	-	-	-	-	-	-
Stage 2	324	319	-	442	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	321	336	684	327	0	735	1197	-	-	1245	-	-
Stage 1	597	578	-	701	0	-	-	-	-	-	-	-
Stage 2	688	653	-	594	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	300	325	684	316	-	735	1197	-	-	1245	-	-
Mov Cap-2 Maneuver	300	325	-	316	-	-	-	-	-	-	-	-
Stage 1	596	560	-	700	-	-	-	-	-	-	-	-
Stage 2	658	652	-	571	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.3			12.6			0.1			0.8		
HCM LOS	В			В								
Minor Lane/Major Mvm	ıt	NBL	NBT	NBR I	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1197	-	-	684	316		1245	-	-		
HCM Lane V/C Ratio		0.002	-	-		0.055			-	-		
HCM Control Delay (s)		8	-	-	10.3	17.1	10.1	8	-	-		
HCM Lane LOS		A	-	-	В	С	В	A	-	-		
HCM 95th %tile Q(veh)		0	-	-	0	0.2	0.1	0.1	-	-		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	₽		ሻ	<b>↑</b>	7	ሻ	<b>₽</b>		ሻ	₽	
Traffic Volume (veh/h)	62	395	13	15	120	147	9	82	53	236	60	56
Future Volume (veh/h)	62	395	13	15	120	147	9	82	53	236	60	56
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	429	14	16	130	160	10	89	58	257	65	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	467	561	18	275	583	494	710	485	316	691	407	382
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1089	1801	59	947	1870	1585	1265	1057	689	1241	888	833
Grp Volume(v), veh/h	67	0	443	16	130	160	10	0	147	257	0	126
Grp Sat Flow(s),veh/h/ln	1089	0	1860	947	1870	1585	1265	0	1746	1241	0	1720
Q Serve(g_s), s	1.9	0.0	8.4	0.6	2.0	3.0	0.2	0.0	2.0	6.1	0.0	1.7
Cycle Q Clear(g_c), s	3.9	0.0	8.4	9.1	2.0	3.0	1.9	0.0	2.0	8.0	0.0	1.7
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.39	1.00		0.48
Lane Grp Cap(c), veh/h	467	0	579	275	583	494	710	0	802	691	0	790
V/C Ratio(X)	0.14	0.00	0.76	0.06	0.22	0.32	0.01	0.00	0.18	0.37	0.00	0.16
Avail Cap(c_a), veh/h	628	0	854	414	858	728	710	0	802	691	0	790
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	12.2	16.3	10.0	10.3	6.7	0.0	6.3	8.6	0.0	6.2
Incr Delay (d2), s/veh	0.1	0.0	2.4	0.1	0.2	0.4	0.0	0.0	0.5	1.5	0.0	0.4
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	0.4	0.0	2.9	0.1	0.6	0.8	0.0	0.0	0.6	1.5	0.0	0.5
Unsig. Movement Delay, s/veh				10.1	10.0					40.0		
LnGrp Delay(d),s/veh	11.6	0.0	14.6	16.4	10.2	10.7	6.8	0.0	6.8	10.2	0.0	6.6
LnGrp LOS	В	A	В	B	В	В	A	Α	A	В	A	A
Approach Vol, veh/h		510			306			157			383	
Approach Delay, s/veh		14.2			10.8			6.8			9.0	
Approach LOS		В			В			А			Α	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		16.7		22.5		16.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		4.0		10.4		10.0		11.1				
Green Ext Time (p_c), s		0.7		1.8		1.1		0.7				
Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			В									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	<b>†</b>	7	ሻ	<b>†</b>	7	ሻ	f)		ሻ	<b>†</b>	7	
Traffic Volume (veh/h)	9	646	23	7	294	15	35	1	39	6	1	4	
Future Volume (veh/h)	9	646	23	7	294	15	35	1	39	6	1	4	
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 Approac	h	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	10	702	25	8	320	16	38	1	42	7	1	4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	452	810	687	188	806	683	540	11	453	477	492	417	
Arrive On Green	0.01	0.43	0.43	0.01	0.43	0.43	0.04	0.29	0.29	0.01	0.26	0.26	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	37	1554	1781	1870	1585	
Grp Volume(v), veh/h	10	702	25	8	320	16	38	0	43	7	1	4	
Grp Sat Flow(s),veh/h/lr		1870	1585	1781	1870	1585	1781	0	1591	1781	1870	1585	
Q Serve(g_s), s	0.2	23.9	0.6	0.2	8.3	0.4	1.1	0.0	1.4	0.2	0.0	0.1	
Cycle Q Clear(g_c), s	0.2	23.9	0.6	0.2	8.3	0.4	1.1	0.0	1.4	0.2	0.0	0.1	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00	
Lane Grp Cap(c), veh/h	452	810	687	188	806	683	540	0	463	477	492	417	
V/C Ratio(X)	0.02	0.87	0.04	0.04	0.40	0.02	0.07	0.00	0.09	0.01	0.00	0.01	
Avail Cap(c_a), veh/h	556	1142	967	297	1142	967	600	0	463	588	492	417	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh		18.1	11.5	15.1	13.7	11.5	17.6	0.0	18.1	18.7	19.1	19.1	
Incr Delay (d2), s/veh	0.0	5.3	0.0	0.1	0.3	0.0	0.1	0.0	0.4	0.0	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		10.1	0.2	0.1	3.2	0.1	0.4	0.0	0.5	0.1	0.0	0.1	
Unsig. Movement Delay													
LnGrp Delay(d),s/veh	11.5	23.3	11.5	15.2	14.1	11.5	17.6	0.0	18.5	18.7	19.1	19.2	
LnGrp LOS	В	С	В	В	В	В	В	Α	В	В	В	В	
Approach Vol, veh/h		737			344			81			12		
Approach Delay, s/veh		22.8			14.0			18.1			18.9		
Approach LOS		С			В			В			В		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc)	s5 1	25.0	5.2	34.9	7.1	23.0	5.4	34.8					
Change Period (Y+Rc),		4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gm		18.5	5.0	42.9	5.0	18.5	5.0	42.9					
Max Q Clear Time (g_c-		3.4	2.2	25.9	3.1	2.1	2.2	10.3					
Green Ext Time (p_c), s		0.1	0.0	4.5	0.0	0.0	0.0	2.0					
,,	0.0	0.1	0.0	+.∪	0.0	0.0	0.0	2.0					
Intersection Summary			10.0										
HCM 6th Ctrl Delay			19.8										
HCM 6th LOS			В										

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		*		7	ሻ	<b>^</b>		ሻ	ĵ.	
Traffic Vol, veh/h	16	0	20	34	0	60	20	281	36	62	269	14
Future Vol, veh/h	16	0	20	34	0	60	20	281	36	62	269	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	_	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	22	37	0	65	22	305	39	67	292	15
Major/Minor I	Minor2			Minor1		1	Major1		ı	Major2		
Conflicting Flow All	835	822	300	814	-	325	307	0	0	344	0	0
Stage 1	434	434	-	369	-	-	-	-	-	-	-	-
Stage 2	401	388	-	445	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	287	309	740	297	0	716	1254	-	-	1215	-	-
Stage 1	600	581	-	651	0	-	-	-	-	-	-	-
Stage 2	626	609	-	592	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	247	287	740	272	-	716	1254	-	-	1215	-	-
Mov Cap-2 Maneuver	247	287	-	272	-	-	-	-	-	-	-	-
Stage 1	589	549	-	639	-	-	-	-	-	-	-	-
Stage 2	559	598	-	543	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	15.2			14			0.5			1.5		
HCM LOS	С			В								
Minor Lane/Major Mvm	ıt	NBL	NBT	NBR I	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1254	-	-	392	272		1215	-	-		
HCM Lane V/C Ratio		0.017	-	-		0.136			-	-		
HCM Control Delay (s)		7.9	-	-	15.2	20.3	10.5	8.1	-	-		
HCM Lane LOS		Α	-	-	С	С	В	Α	-	-		
HCM 95th %tile Q(veh)		0.1	-	-	0.3	0.5	0.3	0.2	-	-		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	₽		ሻ	<b>↑</b>	7	ሻ	₽		ሻ	₽	
Traffic Volume (veh/h)	119	245	21	71	308	140	34	77	48	113	95	115
Future Volume (veh/h)	119	245	21	71	308	140	34	77	48	113	95	115
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	266	23	77	335	152	37	84	52	123	103	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	588	51	420	648	549	576	471	291	661	335	407
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	909	1697	147	1090	1870	1585	1153	1081	669	1253	769	933
Grp Volume(v), veh/h	129	0	289	77	335	152	37	0	136	123	0	228
Grp Sat Flow(s),veh/h/ln	909	0	1844	1090	1870	1585	1153	0	1750	1253	0	1702
Q Serve(g_s), s	5.4	0.0	5.0	2.4	5.9	2.9	0.9	0.0	2.0	2.8	0.0	3.6
Cycle Q Clear(g_c), s	11.3	0.0	5.0	7.5	5.9	2.9	4.5	0.0	2.0	4.7	0.0	3.6
Prop In Lane	1.00		0.08	1.00	212	1.00	1.00		0.38	1.00		0.55
Lane Grp Cap(c), veh/h	360	0	639	420	648	549	576	0	762	661	0	742
V/C Ratio(X)	0.36	0.00	0.45	0.18	0.52	0.28	0.06	0.00	0.18	0.19	0.00	0.31
Avail Cap(c_a), veh/h	441	0	803	517	815	690	576	0	762	661	0	742
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	10.5	13.3	10.7	9.8	9.1	0.0	7.1	8.6	0.0	7.6
Incr Delay (d2), s/veh	0.6	0.0	0.5 0.0	0.2	0.6	0.3	0.2	0.0	0.5 0.0	0.6	0.0	1.1
Initial Q Delay(d3),s/veh	1.0	0.0	1.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	1.2
%ile BackOfQ(50%),veh/ln Unsig. Movement Delay, s/veh		0.0	1.0	0.5	1.9	0.0	0.2	0.0	0.7	0.7	0.0	1.2
LnGrp Delay(d),s/veh	15.9	0.0	11.0	13.6	11.4	10.0	9.3	0.0	7.6	9.2	0.0	8.7
LnGrp LOS	15.9 B	Α	11.0 B	13.0 B	11. <del>4</del> B	10.0	9.5 A	Α	7.0 A	9.2 A	Α	Α
	ь	418	Б	Б	564	ь		173			351	
Approach Vol, veh/h Approach Delay, s/veh		12.5			11.3			8.0			8.9	
		12.5 B			11.3 B			0.0 A			0.9 A	
Approach LOS		D			Б						А	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.8		22.5		18.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		6.5		13.3		6.7		9.5				
Green Ext Time (p_c), s		0.6		1.0		1.4		1.9				
Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			В									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	7		7	7		7	1	Þ				7	
Traffic Volume (veh/h)	2	434	44	58	627	5	40	0	18	26	1	5	
Future Volume (veh/h)	2	434	44	58	627	5	40	0	18	26	1	5	
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 Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	2	472	48	63	682	5	43	0	20	28	1	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	182	705	597	343	795	674	554	0	440	531	500	423	
Arrive On Green	0.00	0.38	0.38	0.05	0.43	0.43	0.04	0.00	0.28	0.03	0.27	0.27	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Grp Volume(v), veh/h	2	472	48	63	682	5	43	0	20	28	1	5	
Grp Sat Flow(s),veh/h/lr	1781	1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Q Serve(g_s), s	0.0	14.3	1.3	1.4	22.5	0.1	1.2	0.0	0.6	8.0	0.0	0.2	
Cycle Q Clear(g_c), s	0.0	14.3	1.3	1.4	22.5	0.1	1.2	0.0	0.6	8.0	0.0	0.2	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	182	705	597	343	795	674	554	0	440	531	500	423	
V/C Ratio(X)	0.01	0.67	0.08	0.18	0.86	0.01	0.08	0.00	0.05	0.05	0.00	0.01	
Avail Cap(c_a), veh/h	308	1199	1016	383	1199	1016	615	0	440	611	500	423	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	15.8	17.7	13.6	12.9	17.7	11.3	16.7	0.0	18.0	17.1	18.3	18.4	
Incr Delay (d2), s/veh	0.0	1.1	0.1	0.3	4.1	0.0	0.1	0.0	0.2	0.0	0.0	0.1	
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	/lr0.0	5.7	0.4	0.5	9.3	0.0	0.5	0.0	0.2	0.3	0.0	0.1	
Unsig. Movement Delay	, s/veh												
LnGrp Delay(d),s/veh	15.9	18.8	13.7	13.2	21.9	11.3	16.8	0.0	18.2	17.1	18.3	18.4	
LnGrp LOS	В	В	В	В	С	В	В	Α	В	В	В	В	
Approach Vol, veh/h		522			750			63			34		
Approach Delay, s/veh		18.3			21.1			17.2			17.4		
Approach LOS		В			С			В			В		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc)	s6 6	23.4	8.0	30.2	7.3	22.7	4.7	33.5					
Change Period (Y+Rc),	-	4.5	4.5	4.5	4.5	4.5	4.7	4.5					
Max Green Setting (Gm		18.2	5.0	43.7	5.1	18.2	5.0	43.7					
Max Q Clear Time (g_c-		2.6	3.4	16.3	3.2	2.2	2.0	24.5					
Green Ext Time (p_c), s		0.0	0.0	3.2	0.0	0.0	0.0	4.5					
`` '	0.0	0.0	0.0	J.Z	0.0	0.0	0.0	+.∪					
Intersection Summary			10.0										
HCM 6th Ctrl Delay			19.8										
HCM 6th LOS			В										



# 2028 Opening Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ሻ	1101	7	ሻ	<b>1</b>	HEIL	ሻ	<u>\$</u>	OBIT
Traffic Vol, veh/h	0	0	5	58	0	70	2	279	61	79	337	2
Future Vol, veh/h	0	0	5	58	0	70	2	279	61	79	337	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	5	63	0	76	2	303	66	86	366	2
Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	917	912	367	882	-	336	368	0	0	369	0	0
Stage 1	539	539	-	340	-	-	-	-	-	-	-	-
Stage 2	378	373	-	542	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	253	274	678	267	0	706	1191	-	-	1190	-	-
Stage 1	527	522	-	675	0	-	-	-	-	-	-	-
Stage 2	644	618	-	525	0	-	-	-	-	-	-	-
Platoon blocked, %	_	_						-	-		-	-
Mov Cap-1 Maneuver	213	254	678	250	-	706	1191	-	-	1190	-	-
Mov Cap-2 Maneuver	213	254	-	250	-	-	-	-	-	-	-	-
Stage 1	526	484	-	674	-	-	-	-	-	-	-	-
Stage 2	574	617	-	483	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.4			16.8			0			1.6		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	VBLn1\	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1191	-	-	678	250	706	1190	-	-		
HCM Lane V/C Ratio		0.002	_	_			0.108		_	_		
HCM Control Delay (s)		8	-	-	10.4	24.2	10.7	8.3	-	-		
HCM Lane LOS		A	-	-	В	С	В	Α	-	-		
HCM 95th %tile Q(veh)	)	0	-	-	0	1	0.4	0.2	-	-		
,												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	₽		7	<b>•</b>	7	ሻ	₽		*	₽	
Traffic Volume (veh/h)	83	459	13	78	183	156	9	103	117	244	80	76
Future Volume (veh/h)	83	459	13	78	183	156	9	103	117	244	80	76
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	10-0	No	10-0	10=0	No	10-0	40-0	No	10=0	10=0	No	40-0
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	499	14	85	199	170	10	112	127	265	87	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	690	19	294	713	604	588	330	374	527	363	346
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1013	1810	51	887	1870	1585	1215	800	907	1141	880	839
Grp Volume(v), veh/h	90	0	513	85	199	170	10	0	239	265	0	170
Grp Sat Flow(s), veh/h/ln	1013	0	1861	887	1870	1585	1215	0	1707	1141	0	1719
Q Serve(g_s), s	2.9	0.0	10.3	3.9	3.2	3.2	0.2	0.0	4.2	9.0	0.0	2.8
Cycle Q Clear(g_c), s	6.2	0.0	10.3	14.2	3.2	3.2	3.0	0.0	4.2	13.2	0.0	2.8
Prop In Lane	1.00	^	0.03	1.00	740	1.00	1.00	^	0.53	1.00	^	0.49
Lane Grp Cap(c), veh/h	477	0	710	294	713	604	588	0	704	527	0	709
V/C Ratio(X)	0.19	0.00	0.72	0.29	0.28	0.28	0.02	0.00	0.34	0.50	0.00	0.24
Avail Cap(c_a), veh/h	508	0	768	322	772	654	588	0	704	527	0	709
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.5 0.2	0.0	11.5 3.1	17.6 0.5	9.3 0.2	9.4 0.3	9.4 0.1	0.0	8.8 1.3	13.3 3.4	0.0	8.4 0.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh %ile BackOfQ(50%),veh/ln	0.0	0.0	3.7	0.0	1.0	0.0	0.0	0.0	1.5	2.4	0.0	1.0
Unsig. Movement Delay, s/veh		0.0	3.1	0.7	1.0	0.9	0.1	0.0	1.5	2.4	0.0	1.0
LnGrp Delay(d),s/veh	11.7	0.0	14.6	18.1	9.6	9.6	9.4	0.0	10.1	16.7	0.0	9.2
LnGrp LOS	В	Α	14.0 B	В	9.0 A	9.0 A	9.4 A	Α	В	В	Α	9.2 A
Approach Vol, veh/h		603	<u> </u>	U	454			249	<u> </u>	D	435	
Approach Delay, s/veh		14.2			11.2			10.0			13.7	
Approach LOS		14.2 B			11.2 B			10.0 B			13.7 B	
Apploach LOS		Ь			Ь			Ь			Ь	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		21.1		22.5		21.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		6.2		12.3		15.2		16.2				
Green Ext Time (p_c), s		1.1		1.8		0.6		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			12.7									
HCM 6th LOS			В									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ķ		7	¥		7	¥	<del>(</del> î		¥	<b>†</b>	7	
Traffic Volume (veh/h)	30	674	66	7	324	50	77	65	39	41	64	25	
Future Volume (veh/h)	30	674	66	7	324	50	77	65	39	41	64	25	
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 Approacl	h	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	33	733	72	8	352	54	84	71	42	45	70	27	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	438	833	706	174	790	669	479	289	171	440	464	393	
Arrive On Green	0.03	0.45	0.45	0.01	0.42	0.42	0.06	0.26	0.26	0.04	0.25	0.25	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1101	652	1781	1870	1585	
Grp Volume(v), veh/h	33	733	72	8	352	54	84	0	113	45	70	27	
Grp Sat Flow(s),veh/h/ln		1870	1585	1781	1870	1585	1781	0	1753	1781	1870	1585	
Q Serve(g_s), s	0.8	26.7	2.0	0.2	10.0	1.5	2.6	0.0	3.8	1.4	2.2	1.0	
Cycle Q Clear(g_c), s	0.8	26.7	2.0	0.2	10.0	1.5	2.6	0.0	3.8	1.4	2.2	1.0	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		1.00	
Lane Grp Cap(c), veh/h		833	706	174	790	669	479	0	460	440	464	393	
V/C Ratio(X)	0.08	0.88	0.10	0.05	0.45	0.08	0.18	0.00	0.25	0.10	0.15	0.07	
Avail Cap(c_a), veh/h	498	1076	912	275	1076	912	500	0	460	487	464	393	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh		18.9	12.0	16.3	15.3	12.9	19.0	0.0	21.7	19.4	21.9	21.5	
Incr Delay (d2), s/veh	0.1	7.0	0.1	0.1	0.4	0.1	0.2	0.0	1.3	0.1	0.7	0.3	
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	
%ile BackOfQ(50%),veh		11.7	0.6	0.1	3.9	0.5	1.1	0.0	1.7	0.6	1.0	0.4	
Unsig. Movement Delay													
LnGrp Delay(d),s/veh	12.0	25.9	12.1	16.4	15.7	12.9	19.2	0.0	22.9	19.5	22.6	21.8	
LnGrp LOS	В	C	В	В	В	В	В	A	C	В	C	C	
Approach Vol, veh/h		838			414			197			142		
Approach Delay, s/veh		24.2			15.4			21.4			21.5		
Approach LOS		C			В			C			C C		
	1		2	4		6	7						
Timer - Assigned Phs	-7.5	2	5 2	27.7	5	6	7	8					
Phs Duration (G+Y+Rc)		24.1	5.3	37.7	8.6	23.0	7.0	36.0					
Change Period (Y+Rc),		4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gm		18.5	5.0	42.9	5.0	18.5	5.0	42.9					
Max Q Clear Time (g_c+	, .	5.8	2.2	28.7	4.6	4.2	2.8	12.0					
Green Ext Time (p_c), s	0.0	0.4	0.0	4.5	0.0	0.3	0.0	2.3					
Intersection Summary													
HCM 6th Ctrl Delay			21.3										
HCM 6th LOS			С										

Intersection						
Int Delay, s/veh	0.4					
-		14/55	Not	NEE	051	057
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		f)		<u>ነ</u>	<b>^</b>
Traffic Vol, veh/h	8	13	340	9	13	410
Future Vol, veh/h	8	13	340	9	13	410
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	-	-	-	100	-
Veh in Median Storage	e,# 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	9	14	370	10	14	446
N.A (N.A.)	N.41.					
	Minor1		Major1		Major2	
Conflicting Flow All	849	375	0	0	380	0
Stage 1	375	-	-	-	-	-
Stage 2	474	-	-	-	-	-
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	331	671	-	-	1178	-
Stage 1	695	-	-	-	-	-
Stage 2	626	-	-	_	-	-
Platoon blocked, %			-	_		-
Mov Cap-1 Maneuver	327	671	_	_	1178	-
Mov Cap-2 Maneuver	447	-	_	_		_
Stage 1	695	_	_	_	_	_
Stage 2	618	_			_	_
Olaye Z	010	_	_	_	_	_
Approach	WB		NB		SB	
HCM Control Delay, s	11.7		0		0.2	
HCM LOS	В					
NAC		NET	NES	MDL 4	051	OPT
Minor Lane/Major Mvr	nt	NBT	NRKA	VBLn1	SBL	SBT
Capacity (veh/h)		-	-		1178	-
HCM Lane V/C Ratio		-	-	0.041	0.012	-
HCM Control Delay (s	)	-	-		8.1	-
HCM Lane LOS		-	-	В	Α	-
HCM 95th %tile Q(veh	1)	-	-	0.1	0	-

Intersection							
Int Delay, s/veh	2.6						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	ሻ	<b>†</b>	<b>↑</b>	7	ሻ	7	
Traffic Vol, veh/h	107	707	362	64	63	106	
Future Vol, veh/h	107	707	362	64	63	106	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-		
Storage Length	120	-	-	120	0	0	
Veh in Median Storage	e, # -	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	116	768	393	70	68	115	
Major/Minor	Major1		Majora		Minor		
	Major1		Major2		Minor2	000	
Conflicting Flow All	463	0	-	0	1393	393	
Stage 1	-	-	-	-	393	-	
Stage 2	-	-	-	-	1000	-	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	2.218	-	-		3.518		
Pot Cap-1 Maneuver	1098	-	-	-	156	656	
Stage 1	-	-	-	-	682	-	
Stage 2	-	-	-	-	356	-	
Platoon blocked, %	4000	-	-	-	400	050	
Mov Cap-1 Maneuver	1098	-	-	-	139	656	
Mov Cap-2 Maneuver	-	-	-	-	262	-	
Stage 1	-	-	-	-	610	-	
Stage 2	-	-	-	-	356	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1.1		0		16.1		
HCM LOS					С		
Minor Lane/Major Mvm	<b>\</b>	EBL	EBT	WBT	WPD	SBLn1	SBLp2
	IL			VVDI			
Capacity (veh/h)		1098	-	-	-	262	656
HCM Central Dalay (a)		0.106	-	-		0.261	
HCM Long LOS		8.7	-	-	-	23.5	11.7
HCM Lane LOS	١	Α	-	-	-	C	В
HCM 95th %tile Q(veh	)	0.4	-	-	-	1	0.6

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥*	LDN	NDL			אמט
Traffic Vol, veh/h	<b>'''</b> 21	106	<b>1</b> 07	<b>↑</b> 38	<b>1</b> → 24	21
Future Vol, veh/h	21	106	107	38	24	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop	None	Free -	None	Free -	
Storage Length	0	None -	100	None -	-	None -
Veh in Median Storage	-		100	0	0	
Grade, %	e, # 0 0	- -	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	92	92	92	92	92	92
Mymt Flow	23	115	116	41	26	23
WIVIIIL FIOW	23	113	110	41	20	23
Major/Minor I	Minor2	<u> </u>	Major1	N	//ajor2	
Conflicting Flow All	311	38	49	0	-	0
Stage 1	38	-	-	-	-	-
Stage 2	273	-	-	-	-	-
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	681	1034	1558	-	_	_
Stage 1	984	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	631	1034	1558	-	-	-
Mov Cap-2 Maneuver	631	_	-	-	-	-
Stage 1	911	_	-	-	_	_
Stage 2	773	-	-	-	-	-
Jago Z	. 10					
Approach	EB		NB		SB	
HCM Control Delay, s	9.5		5.5		0	
HCM LOS	Α					
Minor Lane/Major Mvm	t	NBL	NRT	EBLn1	SBT	SBR
Capacity (veh/h)		1558	-		-	-
HCM Lane V/C Ratio		0.075		0.148	-	-
HCM Control Delay (s)		7.5	_	9.5	_	<u>-</u>
HCM Lane LOS		7.5 A	_	9.5 A	_	_
HCM 95th %tile Q(veh)	)	0.2	_	0.5	_	
John John Q(Ven)	1	U.Z	-	0.0	_	

Intersection
Movement         EBL         EBR         NBL         NBT         SBT         SBR           Lane Configurations         Y
Lane Configurations         Y         1         1           Traffic Vol, veh/h         8         13         13         46         32         9           Future Vol, veh/h         8         13         13         46         32         9
Traffic Vol, veh/h 8 13 13 46 32 9 Future Vol, veh/h 8 13 13 46 32 9
Future Vol, veh/h 8 13 13 46 32 9
,
Conflicting Dode #/hr $\Omega$ $\Omega$ $\Omega$ $\Omega$
Sign Control Stop Stop Free Free Free Free
RT Channelized - None - None - None
Storage Length 0 - 100
Veh in Median Storage, # 0 0 0 -
Grade, % 0 0 0 -
Peak Hour Factor 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2
Mvmt Flow 9 14 14 50 35 10
Major/Minor Minor Major Major
Major/Minor Minor2 Major1 Major2
Conflicting Flow All 118 40 45 0 - 0
Stage 1 40
Stage 2 78
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 878 1031 1563
Stage 1 982
Stage 2 945
Platoon blocked, %
Mov Cap-1 Maneuver 870 1031 1563
Mov Cap-2 Maneuver 870
Stage 1 973
Stage 2 945
5.0g 2
Approach EB NB SB
HCM Control Delay, s 8.8 1.6 0
HCM LOS A
Minor Lang/Major Mymt NRI NRT ERLn1 SRT SRD
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR
Capacity (veh/h) 1563 - 963
Capacity (veh/h) 1563 - 963 HCM Lane V/C Ratio 0.009 - 0.024
Capacity (veh/h) 1563 - 963 HCM Lane V/C Ratio 0.009 - 0.024 HCM Control Delay (s) 7.3 - 8.8
Capacity (veh/h) 1563 - 963 HCM Lane V/C Ratio 0.009 - 0.024

Intersection												
Int Delay, s/veh	5.2											
			EDD	WDI	WDT	WDD	NDI	NDT	NDD	CDI	CDT	CDD
Movement Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	16	4	20	<b>ሻ</b> 74	٥	100	<b>\</b>	200	80		777	14
Traffic Vol, veh/h Future Vol, veh/h	16	0	20	74	0	100	20 20	289 289	80	106 106	277 277	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	209	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Slop -	Slop -	None	Stop -	Stop -	None	-	-	None	-	-	None
Storage Length	<u>-</u>	_	-	0	<u>-</u>	0	100	_	-	100	_	-
Veh in Median Storage		0	_	_	0	-	-	0	_	-	0	_
Grade, %	-, "	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	22	80	0	109	22	314	87	115	301	15
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	995	984	309	952	_	358	316	0	0	401	0	0
Stage 1	539	539	-	402	_	-	-	-	-	-	-	-
Stage 2	456	445	_	550	_	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	_	-	-	-	_	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	_	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	224	248	731	239	0	686	1244	-	-	1158	-	-
Stage 1	527	522	-	625	0	-	-	-	-	-	-	-
Stage 2	584	575	-	519	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	172	219	731	212	-	686	1244	-	-	1158	-	-
Mov Cap-2 Maneuver	172	219	-	212	-	-	-	-	-	-	-	-
Stage 1	518	470	-	614	-	-	-	-	-	-	-	-
Stage 2	483	565	-	454	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	18.8			20			0.4			2.3		
HCM LOS	С			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	VBLn1\	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1244	-	-	299	212	686	1158	-	-		
HCM Lane V/C Ratio		0.017	-	-	0.131	0.379	0.158	0.099	-	-		
HCM Control Delay (s)		7.9	-	-		32	11.2	8.5	-	-		
HCM Lane LOS		Α	-	-	С	D	В	Α	-	-		
HCM 95th %tile Q(veh)	)	0.1	-	-	0.4	1.7	0.6	0.3	-	-		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	₽		7	<b>^</b>	7	7	f)		7	ĵ.	
Traffic Volume (veh/h)	141	312	21	130	367	149	34	99	115	121	115	135
Future Volume (veh/h)	141	312	21	130	367	149	34	99	115	121	115	135
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	339	23	141	399	162	37	108	125	132	125	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	675	46	409	729	618	489	322	372	522	319	375
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	849	1732	117	1020	1870	1585	1107	791	915	1147	783	921
Grp Volume(v), veh/h	153	0	362	141	399	162	37	0	233	132	0	272
Grp Sat Flow(s),veh/h/ln	849	0	1849	1020	1870	1585	1107	0	1706	1147	0	1705
Q Serve(g_s), s	7.5	0.0	6.6	5.4	7.3	3.1	1.1	0.0	4.2	4.0	0.0	5.0
Cycle Q Clear(g_c), s	14.9	0.0	6.6	12.0	7.3	3.1	6.1	0.0	4.2	8.1	0.0	5.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.54	1.00		0.54
Lane Grp Cap(c), veh/h	353	0	721	409	729	618	489	0	694	522	0	694
V/C Ratio(X)	0.43	0.00	0.50	0.35	0.55	0.26	0.08	0.00	0.34	0.25	0.00	0.39
Avail Cap(c_a), veh/h	368	0	752	426	761	645	489	0	694	522	0	694
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	10.2	14.8	10.5	9.2	11.4	0.0	9.0	11.8	0.0	9.3
Incr Delay (d2), s/veh	8.0	0.0	0.5	0.5	8.0	0.2	0.3	0.0	1.3	1.2	0.0	1.7
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	1.3	0.0	2.1	1.1	2.4	0.8	0.3	0.0	1.5	1.0	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	10.8	15.3	11.2	9.4	11.7	0.0	10.3	13.0	0.0	10.9
LnGrp LOS	В	A	В	В	В	A	В	A	В	В	A	В
Approach Vol, veh/h		515			702			270			404	
Approach Delay, s/veh		12.7			11.6			10.5			11.6	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		21.7		22.5		21.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		8.1		16.9		10.1		14.0				
Green Ext Time (p_c), s		1.1		0.4		1.4		1.4				
Intersection Summary												
HCM 6th Ctrl Delay			11.7									
HCM 6th LOS			В									

	ၨ	<b>→</b>	•	•	<b>←</b>	4	•	†	<u> </u>	<b>\</b>	Ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ĭ		7	ř		7	Ť	<del>(</del> î		ř		7
Traffic Volume (veh/h)	24	459	88	58	658	39	80	67	18	59	60	25
Future Volume (veh/h)	24	459	88	58	658	39	80	67	18	59	60	25
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	1	No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	499	96	63	715	42	87	73	20	64	65	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	776	657	348	814	690	475	351	96	453	452	383
Arrive On Green	0.03	0.41	0.41	0.05	0.44	0.44	0.06	0.25	0.25	0.05	0.24	0.24
	1781	1870	1585	1781	1870	1585	1781	1413	387	1781	1870	1585
Grp Volume(v), veh/h	26	499	96	63	715	42	87	0	93	64	65	27
Grp Sat Flow(s), veh/h/ln		1870	1585	1781	1870	1585	1781	0	1801	1781	1870	1585
Q Serve(g_s), s	0.6	16.0	2.8	1.5	26.3	1.2	2.7	0.0	3.1	2.0	2.1	1.0
Cycle Q Clear(g_c), s	0.6	16.0	2.8	1.5	26.3	1.2	2.7	0.0	3.1	2.0	2.1	1.0
Prop In Lane	1.00	10.0	1.00	1.00	20.0	1.00	1.00	0.0	0.22	1.00	۷.۱	1.00
Lane Grp Cap(c), veh/h		776	657	348	814	690	475	0	447	453	452	383
V/C Ratio(X)	0.13	0.64	0.15	0.18	0.88	0.06	0.18	0.00	0.21	0.14	0.14	0.07
Avail Cap(c_a), veh/h	275	1086	920	380	1086	920	496	0.00	447	487	452	383
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		17.6	13.7	13.1	19.4	12.3	19.6	0.00	22.4	19.7	22.4	22.0
Incr Delay (d2), s/veh	0.3	0.9	0.1	0.2	6.6	0.0	0.2	0.0	1.1	0.1	0.7	0.4
Initial Q Delay(d3),s/veh		0.9	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.7	0.4
%ile BackOfQ(50%),veh		6.4	0.0	0.0	11.5	0.0	1.1	0.0	1.4	0.0	1.0	0.0
` ,			0.9	0.5	11.5	0.4	1.1	0.0	1.4	0.0	1.0	0.4
Unsig. Movement Delay	, s/ven 16.4	18.5	13.8	13.3	26.0	12.4	19.7	0.0	23.5	19.8	23.1	22.4
LnGrp Delay(d),s/veh LnGrp LOS	10.4 B	10.5 B	13.0 B	13.3 B	26.0 C	12.4 B	19.7 B	0.0 A	23.5 C	19.0 B	23.1 C	22.4 C
	D		D	D		D	D		U	D		U
Approach Vol, veh/h		621			820			180			156	
Approach LOS		17.7			24.3			21.7			21.6	
Approach LOS		В			С			С			С	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc),	s8.2	23.2	8.2	35.7	8.7	22.7	6.6	37.3				
Change Period (Y+Rc),		4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gma		18.2	5.0	43.7	5.1	18.2	5.0	43.7				
Max Q Clear Time (g_c+		5.1	3.5	18.0	4.7	4.1	2.6	28.3				
Green Ext Time (p_c), s		0.3	0.0	3.5	0.0	0.3	0.0	4.5				
Intersection Summary												
HCM 6th Ctrl Delay			21.5									
HCM 6th LOS			21.3 C									
HOW OUT LOS			C									

Intersection						
Int Delay, s/veh	0.4					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	N.	40	<b>♣</b>	^	<b>\</b>	700
Traffic Vol, veh/h	8	12	396	9	13	389
Future Vol, veh/h	8	12	396	9	13	389
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	-	-	-	100	-
Veh in Median Storage,		-	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	9	13	430	10	14	423
Major/Minor N	/linor1	N	Major1		Major2	
Conflicting Flow All	886	435	0	0	440	0
Stage 1	435	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
		3.318	-	-	2.218	-
Pot Cap-1 Maneuver	315	621	-	-	1120	-
Stage 1	653	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	311	621	-	-	1120	_
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	653	-	_	-	-	_
Stage 2	634	-	-	_	_	_
5 ta gt =						
Approach	WB		NB		SB	
HCM Control Delay, s	12.1		0		0.3	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NRDV	VBLn1	SBL	SBT
IVIII OLL LAUG/IVIAIOLIVIVIIII			NDRV			
		-	-	001	1120	-
Capacity (veh/h)				0.014		
Capacity (veh/h) HCM Lane V/C Ratio		-		0.041		-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	-	12.1	8.3	-
Capacity (veh/h) HCM Lane V/C Ratio						

Intersection							
Int Delay, s/veh	2.8						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	CDL Š	<u> </u>	VVD1	VVDK	SDL Š	JDK 7	
Traffic Vol, veh/h	110	<b>T</b> 512	<b>T</b> 696	<b>67</b>	59	100	
Future Vol, veh/h	110	512	696	67	59	100	
Conflicting Peds, #/hr	0	0	000	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	120	-	-	120	0	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	120	557	757	73	64	109	
Major/Minor M	1ajor1	_ N	Major2		Minor2		
Conflicting Flow All	830	0	- viajoiz	0	1554	757	
Stage 1	-	-	_	-	757	-	
Stage 2	_	_	_	_	797	_	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	802	-	-	-	125	408	
Stage 1	-	-	-	-	463	-	
Stage 2	-	-	-	-	444	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	802	-	-	-	106	408	
Mov Cap-2 Maneuver	-	-	-	-	239	-	
Stage 1	-	-	-	-	394	-	
Stage 2	-	-	-	-	444	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1.8		0		20.2		
HCM LOS					C		
Minor Lang/Major Mumb		EBL	EDT	\\/DT	W/PD	CDI 51 (	CDI 22
Minor Lane/Major Mvmt			EBT	WBT		SBLn1	
Capacity (veh/h) HCM Lane V/C Ratio		802 0.149	-	-	-	239 0.268	408
HCM Control Delay (s)		10.3	-	-	-	25.5	17
HCM Lane LOS		10.3 B	-	-	-	25.5 D	C
HCM 95th %tile Q(veh)		0.5	-	-	-	1.1	1.1
TOWN JOHN JOHN Q(VOII)		0.0				1.1	1.1

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		EDK				SBR
Lane Configurations	70	100	110	<b>†</b>	<b>-</b>	20
Traffic Vol, veh/h	20	100	110	20	44	22
Future Vol, veh/h	20	100	110	20	44	22
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	-	100	-	-	-
Veh in Median Storage,		-	-	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	22	109	120	22	48	24
Major/Minor M	/linor2		Major1		//ajor2	
Conflicting Flow All	322	60	72	0	-	0
Stage 1	60	-	-	-	-	-
Stage 2	262	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518		2.218	-	-	-
Pot Cap-1 Maneuver	672	1005	1528	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Platoon blocked, %				-	_	
					-	-
Mov Cap-1 Maneuver	619	1005	1528	-	-	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	619 619	1005	1528	-		- -
Mov Cap-2 Maneuver	619		1528 - -	-	-	-
Mov Cap-2 Maneuver Stage 1	619 887	-	-	- - -	-	- - -
Mov Cap-2 Maneuver	619	-	-	- - -	- - -	- - - -
Mov Cap-2 Maneuver Stage 1 Stage 2	619 887 782	-	- - -	- - -	- - -	-
Mov Cap-2 Maneuver Stage 1	619 887 782 EB	-	- - - NB	-	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s	619 887 782 EB 9.6	-	- - -	-	- - -	-
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach	619 887 782 EB	-	- - - NB	-	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s	619 887 782 EB 9.6	-	- - - NB	-	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS	619 887 782 EB 9.6 A	-	- - - NB 6.4	- - - -	- - - - SB 0	-
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt	619 887 782 EB 9.6 A	- - - NBL	- - - NB 6.4	- - - -	- - - - SB 0	- - - - - SBR
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h)	619 887 782 EB 9.6 A	- - - NBL 1528	NB 6.4	910	- - - - SB 0	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	619 887 782 EB 9.6 A	NBL 1528 0.078	NB 6.4	910 0.143	- - - - SB 0	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	619 887 782 EB 9.6 A	NBL 1528 0.078 7.6	NB 6.4	910 0.143 9.6	- - - - SB 0	
Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio	619 887 782 EB 9.6 A	NBL 1528 0.078	NB 6.4	910 0.143	- - - - SB 0	SBR

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	LDIX	NDL	<u> </u>	- 1 <u>00</u> 1	אנטט
Traffic Vol, veh/h	<b>T</b>	12	13	<b>T</b> 27	54	9
	8	12	13	27	54 54	9
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr						
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	100	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage,		-	-	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	9	13	14	29	59	10
Major/Minor N	/linor2		Major1	ı	/lajor2	
	121	64	69	0	//ajuiz -	0
Conflicting Flow All	64	04			-	-
Stage 1			-	-		
Stage 2	57	- 00	4 40	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518	3.318		-	-	-
Pot Cap-1 Maneuver	874	1000	1532	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	866	1000	1532	-	-	-
Mov Cap-2 Maneuver	866	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	966	-	-	-	-	-
J. J.						
Approach	EB		NB		SB	
HCM Control Delay, s	8.9		2.4		0	
HCM LOS	Α					
Minor Lane/Major Mvmt	l	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1532		942		-
HCM Lane V/C Ratio		0.009		0.023	_	_
		7.4	-	8.9	-	-
		7.4	_	0.5	_	_
HCM Lang LOS				۸		
HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)		A 0	-	A 0.1	-	-



## 2033 Future Year Traffic Analysis

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች		7	ች	ĵ.		*	ĵ.	
Traffic Vol, veh/h	0	0	6	20	0	34	3	330	21	44	403	3
Future Vol, veh/h	0	0	6	20	0	34	3	330	21	44	403	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	0	_	0	100	_	-	100	-	-
Veh in Median Storage	e,# -	0	_	-	0	-	-	0	_	-	0	-
Grade, %	-	0	_	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	22	0	37	3	359	23	48	438	3
			•								.00	
Major/Minor	Minor2			Minor1			Major1		ı	Major2		
Conflicting Flow All	931	924	440	916	_	371	441	0	0	382	0	0
Stage 1	536	536	-	377	_	-	-	-	-	-	-	-
Stage 2	395	388	<u>-</u>	539	_	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	_	6.22	4.12	_	_	4.12	_	_
Critical Hdwy Stg 1	6.12	5.52	0.22	6.12	_	- 0.22	- 1.12	_	_	T. 1Z	_	_
Critical Hdwy Stg 2	6.12	5.52	_	6.12	_	_	_	_	_	_	_	_
Follow-up Hdwy	3.518	4.018	3.318		_	3.318	2 218	_	_	2.218	_	_
Pot Cap-1 Maneuver	247	269	617	253	0	675	1119	_	_	1176	_	
Stage 1	529	523	- 017	644	0	010	1110	_		- 1170	_	
Stage 2	630	609		527	0						_	_
Platoon blocked, %	000	003	_	JLI	U			_			_	
Mov Cap-1 Maneuver	226	257	617	242	_	675	1119	_	_	1176	_	_
Mov Cap-1 Maneuver	226	257	- 017	242	_	-	- 1113	_	_	-	_	_
Stage 1	527	502	_	642	_	_	_	_	_	_	_	_
Stage 2	594	607	_	500						_	_	_
Olaye 2	JJ-1	501	_	500						_		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.9			14.6			0.1			0.8		
HCM LOS	В			В			V. 1			0.0		
TOW LOO	U			D								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	-BI n1V	VBLn1V	VBI n2	SBL	SBT	SBR		
Capacity (veh/h)		1119			617	242	675	1176		-		
HCM Lane V/C Ratio		0.003	_		0.011	0.09	0.055		_	_		
HCM Control Delay (s)		8.2	-	_	10.9	21.3	10.6	8.2	-			
HCM Lane LOS		0.2 A	-	_	10.9 B	21.3 C	В	Α	-	-		
HCM 95th %tile Q(veh	١	0	<u>-</u>	_	0	0.3	0.2	0.1	-	<u>-</u>		
	1	U	-	_	U	0.5	0.2	0.1	-	-		

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>₽</b>		ሻ	<b>↑</b>	7	ሻ	<b>₽</b>		ሻ	ĵ₃	
Traffic Volume (veh/h)	75	481	16	19	147	179	11	100	64	288	73	68
Future Volume (veh/h)	75	481	16	19	147	179	11	100	64	288	73	68
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	523	17	21	160	195	12	109	70	313	79	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	472	635	21	249	660	559	637	459	295	615	383	359
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1026	1801	59	866	1870	1585	1234	1064	683	1205	888	832
Grp Volume(v), veh/h	82	0	540	21	160	195	12	0	179	313	0	153
Grp Sat Flow(s),veh/h/ln	1026	0	1860	866	1870	1585	1234	0	1747	1205	0	1721
Q Serve(g_s), s	2.6	0.0	11.0	0.9	2.5	3.8	0.3	0.0	2.7	9.3	0.0	2.3
Cycle Q Clear(g_c), s	5.1	0.0	11.0	12.0	2.5	3.8	2.6	0.0	2.7	12.0	0.0	2.3
Prop In Lane	1.00	•	0.03	1.00	000	1.00	1.00	•	0.39	1.00	•	0.48
Lane Grp Cap(c), veh/h	472	0	656	249	660	559	637	0	754	615	0	742
V/C Ratio(X)	0.17	0.00	0.82	0.08	0.24	0.35	0.02	0.00	0.24	0.51	0.00	0.21
Avail Cap(c_a), veh/h	553	0	803	317	807	684	637	1.00	754	615	0	742
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 11.4	0.00	1.00 12.3	1.00 17.8	1.00 9.6	1.00 10.0	1.00 8.2	0.00	1.00 7.5	1.00 11.3	0.00	1.00 7.4
Uniform Delay (d), s/veh	0.2	0.0	5.8	0.1	0.2	0.4	0.2	0.0	0.7	3.0	0.0	0.6
Incr Delay (d2), s/veh Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	4.4	0.0	0.0	1.0	0.0	0.0	0.0	2.5	0.0	0.8
Unsig. Movement Delay, s/veh		0.0	4.4	0.2	0.0	1.0	0.1	0.0	0.9	2.0	0.0	0.0
LnGrp Delay(d),s/veh	11.5	0.0	18.1	17.9	9.7	10.3	8.3	0.0	8.3	14.3	0.0	8.0
LnGrp LOS	11.3 B	Α	В	17.3 B	Α	В	0.5 A	Α	Α	14.3 B	Α	Α
Approach Vol, veh/h		622			376			191			466	
Approach Delay, s/veh		17.2			10.5			8.3			12.2	
Approach LOS		В			В			Α			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		19.2		22.5		19.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		4.7		13.0		14.0		14.0				
Green Ext Time (p_c), s		0.8		1.7		0.9		0.6				
Intersection Summary												
HCM 6th Ctrl Delay			13.3									
HCM 6th LOS			В									

SBR 7
•
1
4
4
0
1.00
1.00
1870
4
0.92
2
365
0.23
1585
4
1585
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0.2
1.00
365
0.01
365
1.00
1.00
23.8
0.1
0.0
0.1
23.9
С

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች		7	ች	î,		ች	ĵ.	
Traffic Vol, veh/h	20	0	24	41	0	73	24	342	44	75	327	17
Future Vol, veh/h	20	0	24	41	0	73	24	342	44	75	327	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	<u> </u>	_	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	26	45	0	79	26	372	48	82	355	18
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1016	1000	364	989	-	396	373	0	0	420	0	0
Stage 1	528	528	-	448	-	-	-	-	-	-	-	-
Stage 2	488	472	-	541	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	216	243	681	226	0	653	1185	-	-	1139	-	-
Stage 1	534	528	-	590	0	-	-	-	-	-	-	-
Stage 2	561	559	-	525	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	176	221	681	202	-	653	1185	-	-	1139	-	-
Mov Cap-2 Maneuver	176	221	-	202	-	-	-	-	-	-	-	-
Stage 1	522	490	-	577	-	-	-	-	-	-	-	-
Stage 2	482	547	-	469	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	19.5			17.2			0.5			1.5		
HCM LOS	С			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1185	-	-	296	202	653	1139	-	-		
HCM Lane V/C Ratio		0.022	-	-	0.162	0.221	0.122	0.072	-	-		
HCM Control Delay (s)		8.1	-	-	19.5	27.8	11.3	8.4	-	-		
HCM Lane LOS		Α	-	-	С	D	В	Α	-	-		
HCM 95th %tile Q(veh	)	0.1	-	-	0.6	8.0	0.4	0.2	-	-		
,	,											

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	Դ		ሻ	<b>•</b>	7	ሻ	₽		*	Դ	
Traffic Volume (veh/h)	145	297	26	87	374	171	41	94	58	138	115	139
Future Volume (veh/h)	145	297	26	87	374	171	41	94	58	138	115	139
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	10-0	No	10-0	10-0	No	10-0	40-0	No	10=0	10=0	No	40-0
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	323	28	95	407	186	45	102	63	150	125	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	674	58	424	743	630	476	435	268	575	310	374
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	824	1697	147	1030	1870	1585	1103	1082	668	1221	771	932
Grp Volume(v), veh/h	158	0	351	95	407	186	45	0	165	150	0	276
Grp Sat Flow(s),veh/h/ln	824	0	1844	1030	1870	1585	1103	0	1750	1221	0	1703
Q Serve(g_s), s	8.2	0.0	6.3	3.4	7.5	3.6	1.4	0.0	2.8	4.1	0.0	5.2
Cycle Q Clear(g_c), s	15.7	0.0	6.3	9.7	7.5	3.6	6.5	0.0	2.8	6.9	0.0	5.2
Prop In Lane	1.00	^	0.08	1.00	7.40	1.00	1.00	•	0.38	1.00	•	0.55
Lane Grp Cap(c), veh/h	350	0	733	424	743	630	476	0	703	575	0	684
V/C Ratio(X)	0.45	0.00	0.48	0.22	0.55	0.30	0.09	0.00	0.23	0.26	0.00	0.40
Avail Cap(c_a), veh/h	354	0	741	429	752	637	476	0	703	575	0	684
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4 0.9	0.0	10.0 0.5	13.7 0.3	10.4 0.8	9.2 0.3	11.9 0.4	0.0	8.9 0.8	11.1 1.1	0.0	9.6 1.8
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh %ile BackOfQ(50%),veh/ln	1.4	0.0	2.0	0.0	2.4	1.0	0.0	0.0	1.0	1.1	0.0	1.9
Unsig. Movement Delay, s/veh	1.4	0.0	2.0	0.7	2.4	1.0	0.3	0.0	1.0	1.1	0.0	1.9
LnGrp Delay(d),s/veh	17.4	0.0	10.5	13.9	11.2	9.5	12.3	0.0	9.6	12.2	0.0	11.3
LnGrp LOS	В	Α	10.5 B	13.9 B	11.2 B	9.5 A	12.3 B	Α	9.0 A	12.2 B	Α	11.3 B
Approach Vol, veh/h	D	509	D	D	688		ь	210		D	426	ь
Approach Delay, s/veh		12.7			11.1			10.2			11.7	
Approach LOS		12.7 B			В			В			В	
					ט						D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.3		22.5		22.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		8.5		17.7		8.9		11.7				
Green Ext Time (p_c), s		0.7		0.1		1.6		1.9				
Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			В									

	۶	<b>→</b>	•	•	<b>←</b>	•	•	†	<b>/</b>	/	ļ	4	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ř		7	Ť	<b>†</b>	7	Ť	f)		Ť	<b>†</b>	7	
Traffic Volume (veh/h)	3	528	54	71	763	6	48	0	21	31	1	6	
Future Volume (veh/h)	3	528	54	71	763	6	48	0	21	31	1	6	
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 Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	3	574	59	77	829	7	52	0	23	34	1	7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	152	821	696	337	911	772	499	0	387	475	438	371	
Arrive On Green	0.00	0.44	0.44	0.05	0.49	0.49	0.04	0.00	0.24	0.03	0.23	0.23	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Grp Volume(v), veh/h	3	574	59	77	829	7	52	0	23	34	1	7	
Grp Sat Flow(s),veh/h/lr	1781	1870	1585	1781	1870	1585	1781	0	1585	1781	1870	1585	
Q Serve(g_s), s	0.1	19.3	1.7	1.7	31.8	0.2	1.7	0.0	0.9	1.1	0.0	0.3	
Cycle Q Clear(g_c), s	0.1	19.3	1.7	1.7	31.8	0.2	1.7	0.0	0.9	1.1	0.0	0.3	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	152	821	696	337	911	772	499	0	387	475	438	371	
V/C Ratio(X)	0.02	0.70	0.08	0.23	0.91	0.01	0.10	0.00	0.06	0.07	0.00	0.02	
Avail Cap(c_a), veh/h	259	1051	891	359	1051	891	538	0	387	533	438	371	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	17.1	17.7	12.7	12.9	18.4	10.3	20.9	0.0	22.6	21.3	22.8	22.9	
Incr Delay (d2), s/veh	0.1	1.5	0.1	0.3	10.6	0.0	0.1	0.0	0.3	0.1	0.0	0.1	
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	n/lr0.0	7.8	0.6	0.6	14.5	0.1	0.7	0.0	0.4	0.5	0.0	0.1	
Unsig. Movement Delay	, s/veh												
LnGrp Delay(d),s/veh	17.2	19.1	12.8	13.2	29.0	10.3	21.0	0.0	22.9	21.3	22.8	23.0	
LnGrp LOS	В	В	В	В	С	В	С	Α	С	С	С	С	
Approach Vol, veh/h		636			913			75			42		
Approach Delay, s/veh		18.5			27.5			21.6			21.7		
Approach LOS		В			С			С			С		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc)	s7 1	23.5	8.6	38.6	7.9	22.7	4.8	42.4					
Change Period (Y+Rc),	-	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gm		18.2	5.0	43.7	5.1	18.2	5.0	43.7					
Max Q Clear Time (g_c-	, ,	2.9	3.7	21.3	3.7	2.3	2.1	33.8					
Green Ext Time (p_c), s		0.0	0.0	3.9	0.0	0.0	0.0	4.1					
Intersection Summary													
			23.6										
HCM 6th Ctrl Delay													
HCM 6th LOS			С										



## 2033 Future Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		Ť		7	ሻ	f)		*	£	
Traffic Vol, veh/h	0	0	6	62	0	76	3	338	64	87	409	3
Future Vol, veh/h	0	0	6	62	0	76	3	338	64	87	409	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	е,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	67	0	83	3	367	70	95	445	3
Major/Minor	Minor2			Minor1			Major1		ľ	Major2		
Conflicting Flow All	1087	1080	447	1048	-	402	448	0	0	437	0	0
Stage 1	637	637	-	408	-	-	-	-	-	-	-	-
Stage 2	450	443	-	640	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	194	218	612	206	0	648	1112	-	-	1123	-	-
Stage 1	465	471	-	620	0	-	-	-	-	-	-	-
Stage 2	589	576	-	464	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	158	199	612	190	-	648	1112	-	-	1123	-	-
Mov Cap-2 Maneuver	158	199	-	190	-	-	-	-	-	-	-	-
Stage 1	464	431	-	618	-	-	-	-	-	-	-	-
Stage 2	513	574	-	420	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.9			21.6			0.1			1.5		
HCM LOS	В			С								
	-											
Minor Lane/Major Mvn	nt	NBL	NBT	NBR I	EBLn1V	VBLn1V	VBLn2	SBL	SBT	SBR		
Capacity (veh/h)		1112	-	-	212	190	648	1123	-	_		
HCM Lane V/C Ratio		0.003	-	-		0.355			-	-		
HCM Control Delay (s)		8.2	_	_		34	11.4	8.5	_	-		
HCM Lane LOS		A	-	-	В	D	В	A	-	-		
HCM 95th %tile Q(veh	)	0	-	-	0	1.5	0.4	0.3	-	-		
	,											

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	₽		ሻ	<b>↑</b>	7	ሻ	<b>₽</b>		ሻ	₽	
Traffic Volume (veh/h)	96	545	16	82	210	188	11	121	128	296	93	88
Future Volume (veh/h)	96	545	16	82	210	188	11	121	128	296	93	88
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	592	17	89	228	204	12	132	139	322	101	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	724	21	248	748	634	542	334	351	478	353	335
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	956	1809	52	812	1870	1585	1186	834	878	1108	882	838
Grp Volume(v), veh/h	104	0	609	89	228	204	12	0	271	322	0	197
Grp Sat Flow(s),veh/h/ln	956	0	1861	812	1870	1585	1186	0	1712	1108	0	1720
Q Serve(g_s), s	3.8	0.0	13.1	4.9	3.7	4.0	0.3	0.0	5.1	12.9	0.0	3.5
Cycle Q Clear(g_c), s	7.5	0.0	13.1	18.0	3.7	4.0	3.8	0.0	5.1	18.0	0.0	3.5
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.51	1.00		0.49
Lane Grp Cap(c), veh/h	463	0	744	248	748	634	542	0	685	478	0	688
V/C Ratio(X)	0.22	0.00	0.82	0.36	0.30	0.32	0.02	0.00	0.40	0.67	0.00	0.29
Avail Cap(c_a), veh/h	463	0	744	248	748	634	542	0	685	478	0	688
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	12.0	20.1	9.2	9.3	10.4	0.0	9.6	16.1	0.0	9.1
Incr Delay (d2), s/veh	0.2	0.0	7.1	0.9	0.2	0.3	0.1	0.0	1.7	7.4	0.0	1.0
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	0.0	5.4	0.9	1.2	1.1	0.1	0.0	1.9	3.8	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	19.2	21.0	9.5	9.6	10.5	0.0	11.3	23.5	0.0	10.2
LnGrp LOS	В	Α	В	С	Α	Α	В	A	В	С	Α	<u>B</u>
Approach Vol, veh/h		713			521			283			519	
Approach Delay, s/veh		18.1			11.5			11.3			18.4	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		7.1		15.1		20.0		20.0				
Green Ext Time (p_c), s		1.3		1.2		0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			В									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			7	7		7	1	₽		7		7	
Traffic Volume (veh/h)	32	814	71	9	387	54	85	65	47	42	64	25	
Future Volume (veh/h)	32	814	71	9	387	54	85	65	47	42	64	25	
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 Approac		No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	35	885	77	10	421	59	92	71	51	46	70	27	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	438	926	785	131	887	752	436	244	175	388	420	356	
Arrive On Green	0.03	0.49	0.49	0.01	0.47	0.47	0.06	0.24	0.24	0.04	0.22	0.22	
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1012	727	1781	1870	1585	
Grp Volume(v), veh/h	35	885	77	10	421	59	92	0	122	46	70	27	
Grp Sat Flow(s), veh/h/lr	1781	1870	1585	1781	1870	1585	1781	0	1739	1781	1870	1585	
Q Serve(g_s), s	0.8	38.4	2.2	0.2	12.9	1.7	3.3	0.0	4.8	1.7	2.6	1.1	
Cycle Q Clear(g_c), s	0.8	38.4	2.2	0.2	12.9	1.7	3.3	0.0	4.8	1.7	2.6	1.1	
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00	
Lane Grp Cap(c), veh/h	438	926	785	131	887	752	436	0	419	388	420	356	
V/C Ratio(X)	0.08	0.96	0.10	0.08	0.47	0.08	0.21	0.00	0.29	0.12	0.17	80.0	
Avail Cap(c_a), veh/h	484	948	803	214	948	803	445	0	419	426	420	356	
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	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	11.5	20.5	11.3	19.3	15.1	12.2	23.2	0.0	26.2	23.6	26.5	25.9	
Incr Delay (d2), s/veh	0.1	19.2	0.1	0.2	0.4	0.0	0.2	0.0	1.8	0.1	0.9	0.4	
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	/lr0.3	19.7	0.7	0.1	5.1	0.6	1.4	0.0	2.2	0.7	1.2	0.5	
Unsig. Movement Delay	, s/veh												
LnGrp Delay(d),s/veh	11.6	39.7	11.4	19.5	15.5	12.2	23.4	0.0	28.0	23.8	27.3	26.3	
LnGrp LOS	В	D	В	В	В	В	С	Α	С	С	С	С	
Approach Vol, veh/h		997			490			214			143		
Approach Delay, s/veh		36.5			15.2			26.0			26.0		
Approach LOS		D			В			С			С		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc)	, s7.8	24.9	5.5	46.4	9.2	23.5	7.3	44.6					
Change Period (Y+Rc),		4.5	4.5	4.5	4.5	4.5	4.5	4.5					
		19.0	5.0	42.9	5.1	19.0	5.0	42.9					
Max Q Clear Time (g_c-		6.8	2.2	40.4	5.3	4.6	2.8	14.9					
Green Ext Time (p_c), s	, .	0.5	0.0	1.5	0.0	0.3	0.0	2.8					
Intersection Summary													
			28.8										
HCM 6th LOS			С										
Change Period (Y+Rc), Max Green Setting (Gm Max Q Clear Time (g_c- Green Ext Time (p_c), s Intersection Summary HCM 6th Ctrl Delay	s 4.5 ax5,.\$	4.5 19.0 6.8	4.5 5.0 2.2 0.0	4.5 42.9 40.4	4.5 5.1 5.3	4.5 19.0 4.6	4.5 5.0 2.8	4.5 42.9 14.9					

Int Delay, s/veh
Movement
Lane Configurations
Traffic Vol, veh/h         8         13         414         9         13         491           Future Vol, veh/h         8         13         414         9         13         491           Conflicting Peds, #/hr         0         0         0         0         0         0           Sign Control         Stop         Stop         Free         <
Future Vol, veh/h Conflicting Peds, #/hr O Conflicting Free Conflicting Fire Conflicting Flow All Conflicting Flow All Conflicting Flow All Conflicting Hody Conflicting Flow All Conflicting Flow All Conflicting Flow All Conflicting Flow All Conflicting Flow Conflicting Conflicting Conflicting Conflicting Conflicting Conflicting Con
Conflicting Peds, #/hr         0         0         0         0         0         0           Sign Control         Stop         Stop         Free         Pa         0         4         2         2         2         2
Sign Control         Stop RT Channelized         Stop None         Free RT Channelized         Free RT Channelized         - None         - Oo         <
RT Channelized         - None         - None         - None           Storage Length         0         0         - 100         -           Veh in Median Storage, #         0         - 0         0         -         0           Grade, %         0         - 0         0         0         - 0<
Storage Length         0         0         -         -         100         -           Veh in Median Storage, #         0         -         0         -         -         0           Grade, %         0         -         0         -         -         0           Peak Hour Factor         92         92         92         92         92         92           Heavy Vehicles, %         2 </td
Veh in Median Storage, #         0         -         0         -         -         0           Grade, %         0         -         0         -         0         -         0           Peak Hour Factor         92         92         92         92         92         92         92           Heavy Vehicles, %         2         4         4         5         4         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""></t<>
Grade, %         0         -         0         -         -         0           Peak Hour Factor         92
Peak Hour Factor         92
Heavy Vehicles, %   2   2   2   2   2   2   2   2   Mvmt Flow
Mynt Flow         9         14         450         10         14         534           Major/Minor         Minor1         Major1         Major2           Conflicting Flow All         1017         455         0         0         460         0           Stage 1         455         -         -         -         -         -           Stage 2         562         -         -         -         -         -           Critical Hdwy         6.42         6.22         -         -         4.12         -           Critical Hdwy Stg 1         5.42         -         -         -         -         -           Critical Hdwy Stg 2         5.42         -         -         -         -         -           Critical Hdwy Stg 2         5.42         -         -         -         -         -           Follow-up Hdwy         3.518         3.318         -         2.218         -           Follow-up Hdwy         3.518         3.318         -         2.218         -           Pot Cap-1 Maneuver         263         605         -         -         1101         -           Mov Cap-2 Maneuver         391         <
Major/Minor         Minor1         Major1         Major2           Conflicting Flow All         1017         455         0         0         460         0           Stage 1         455         -
Conflicting Flow All         1017         455         0         0         460         0           Stage 1         455         -
Conflicting Flow All         1017         455         0         0         460         0           Stage 1         455         -
Conflicting Flow All         1017         455         0         0         460         0           Stage 1         455         -
Stage 1       455       -        -       -       -       -       -       -       -       -       -       -       -       -       -       -       -        -       -       -       -       -       -       -       -       -       -       - <th< td=""></th<>
Stage 2       562       -        -       -       -       -       -       -       -       -       -       -       -       -       -       -       -        -       -       -       -       -       -       -       -       -       -       - <th< td=""></th<>
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         263         605         -         -         1101         -           Stage 1         639         -         -         -         -         -           Platoon blocked, %         -         -         -         -         -         -           Mov Cap-1 Maneuver         260         605         -         -         1101         -           Mov Cap-2 Maneuver         391         -         -         -         -         -           Stage 1         639         -         -         -         -         -           Stage 2         564         -         -         -         -         -           Approach         WB         NB         SB           HCM Control Delay, s         12.4         0         0         0.2
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 263 605 - 1101 -  Stage 1 639  Stage 2 571  Platoon blocked, %  Mov Cap-1 Maneuver 260 605 - 1101 -  Mov Cap-2 Maneuver 391  Stage 1 639  Stage 2 564  Approach WB NB SB  HCM Control Delay, s 12.4 0 0.2  HCM LOS B  Minor Lane/Major Mvmt NBT NBRWBLn1WBLn2 SBL  Capacity (veh/h) - 391 605 1101  HCM Lane V/C Ratio - 0.022 0.023 0.013
Pot Cap-1 Maneuver         263         605         -         -         1101         -           Stage 1         639         -
Stage 1         639         -
Stage 2         571         -
Platoon blocked, %         -         -         -           Mov Cap-1 Maneuver         260         605         -         -         1101         -           Mov Cap-2 Maneuver         391         -
Mov Cap-1 Maneuver         260         605         -         -         1101         -           Mov Cap-2 Maneuver         391         -
Mov Cap-2 Maneuver         391         -
Mov Cap-2 Maneuver         391         -
Stage 1         639         -
Stage 2         564         -
Approach         WB         NB         SB           HCM Control Delay, s         12.4         0         0.2           HCM LOS         B           Minor Lane/Major Mvmt         NBT         NBRWBLn1WBLn2         SBL           Capacity (veh/h)         -         391         605         1101           HCM Lane V/C Ratio         -         0.022         0.023         0.013
HCM Control Delay, s   12.4   0   0.2
HCM Control Delay, s   12.4   0   0.2
Minor Lane/Major Mvmt         NBT         NBRWBLn1WBLn2         SBL           Capacity (veh/h)         -         -         391         605         1101           HCM Lane V/C Ratio         -         -         0.022         0.023         0.013
Minor Lane/Major Mvmt         NBT         NBRWBLn1WBLn2         SBL           Capacity (veh/h)         -         -         391         605         1101           HCM Lane V/C Ratio         -         -         0.022         0.023         0.013
Capacity (veh/h) 391 605 1101 HCM Lane V/C Ratio - 0.022 0.023 0.013
Capacity (veh/h) 391 605 1101 HCM Lane V/C Ratio - 0.022 0.023 0.013
Capacity (veh/h) 391 605 1101 HCM Lane V/C Ratio - 0.022 0.023 0.013
HCM Lane V/C Ratio 0.022 0.023 0.013
HCIVI CONTROL DEIAV (S) - 14.4 11.1 8.3
HCM Lane LOS B B A
HCM 95th %tile Q(veh) 0.1 0.1 0

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ሻ	<u></u>	<u>₩</u>	7	ሻ	7
Traffic Vol, veh/h	107	854	433	64	63	106
Future Vol, veh/h	107	854	433	64	63	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	_	120	0	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
Mymt Flow	116	928	471	70	68	115
WWW	110	020		10	00	110
				-		
	Major1		Major2		Minor2	
Conflicting Flow All	541	0	-	0	1631	471
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	1160	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1028	-	-	-	112	593
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	298	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1028	-	-	-	99	593
Mov Cap-2 Maneuver	-	-	-	-	217	-
Stage 1	-	_	-	-	557	-
Stage 2	-	-	-	-	298	-
A norse och	EB		WB		SB	
Approach						
HCM Control Delay, s	1		0		18.7	
HCM LOS					С	
Minor Lane/Major Mvm	ıt	EBL	EBT	WBT	WBR :	SBLn1 S
Capacity (veh/h)		1028	-	-	_	217
HCM Lane V/C Ratio		0.113	-	-	-	0.316
HCM Control Delay (s)		8.9	-	_	_	29.1
HCM Lane LOS		Α	-	-	-	D
HCM 95th %tile Q(veh)		0.4	-	-	-	1.3
J 222. 704.0 C(1011)						

Intersection						
Int Delay, s/veh	6.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
						SDK
Lane Configurations	<b>\</b>	100	107	<b>↑</b>	<b>}</b>	04
Traffic Vol, veh/h	21	106	107	44	25	21
Future Vol, veh/h	21	106	107	44	25	21
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	0	100	-	-	-
Veh in Median Storage,		-	-	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	23	115	116	48	27	23
Major/Minor M	1inor2		Major1		Major2	
Conflicting Flow All	319	39	50	0	-	0
Stage 1	39	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	674	1033	1557	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	623	1033	1557	-	-	-
Mov Cap-2 Maneuver	656	-	-	-	-	-
Stage 1	909	-	_	-	-	-
Stage 2	767	-	-	-	-	-
, and the second						
			ND		0.0	
Approach	EB		NB		SB	
HCM Control Delay, s	9.2		5.3		0	
HCM LOS	Α					
Minor Lane/Major Mvmt		NBL	NRT	EBLn1 I	FBI n2	SBT
or Land/Major MMIII		1557	-		1033	-
Canacity (yeh/h)			_			
Capacity (veh/h)				ሀ ሀሪድ	(1117)	
HCM Lane V/C Ratio		0.075	-	0.035		-
HCM Lane V/C Ratio HCM Control Delay (s)		0.075 7.5	-	10.7	8.9	-
HCM Lane V/C Ratio		0.075	- - -			

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	T T	ሻ	<u> </u>	\$	ODIN
Traffic Vol, veh/h	8	13	13	52	33	9
Future Vol, veh/h	8	13	13	52	33	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- Olop	None	-	None	-	None
Storage Length	0	0	100	-	_	-
Veh in Median Storage		-	-	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	9	14	14	57	36	10
IVIVITIT FIOW	9	14	14	5/	30	10
Major/Minor I	Minor2	I	Major1	ľ	Major2	
Conflicting Flow All	126	41	46	0	-	0
Stage 1	41	_	-	-	_	-
Stage 2	85	_	_	_	-	_
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	-	-	_	_	_
Critical Hdwy Stg 2	5.42	_	_	_	_	_
Follow-up Hdwy		3.318	2 218	_	_	_
Pot Cap-1 Maneuver	869	1030	1562	_	_	_
Stage 1	981	1000	1002	_	_	_
Stage 2	938	_				
Platoon blocked, %	330	_	_	_	_	_
	861	1030	1562	-	-	-
Mov Cap-1 Maneuver			1002	-	-	-
Mov Cap-2 Maneuver	861	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	8.8		1.5		0	
HCM LOS	A		1.0		•	
110111 200	, ,					
Minor Lane/Major Mvm	<u>nt</u>	NBL	NBT	EBLn1 I		SBT
Capacity (veh/h)		1562	-	861	1030	-
HCM Lane V/C Ratio		0.009	-		0.014	-
HCM Control Delay (s)		7.3	-	9.2	8.5	-
HCM Lane LOS		Α	-	Α	Α	-
HCM 95th %tile Q(veh)	)	0	-	0	0	-

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		ች		7	ሻ	1→		*	<b>\$</b>	
Traffic Vol, veh/h	20	0	24	81	0	113	24	351	88	119	335	17
Future Vol, veh/h	20	0	24	81	0	113	24	351	88	119	335	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	26	88	0	123	26	382	96	129	364	18
Major/Minor I	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1175	1161	373	1126	_	430	382	0	0	478	0	0
Stage 1	631	631	-	482	_	-	-	-	-	-	-	_
Stage 2	544	530	-	644	-	-	-	_	_	_	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	_	6.22	4.12	-	_	4.12	-	_
Critical Hdwy Stg 1	6.12	5.52	-	6.12	-		-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	-	_	_	-	_	-	-	-
Follow-up Hdwy	3.518	4.018	3.318		-	3.318	2.218	-	_	2.218	-	-
Pot Cap-1 Maneuver	168	195	673	182	0	625	1176	-	-	1084	-	-
Stage 1	469	474	-	565	0	-	-	-	-	-	-	-
Stage 2	523	527	-	461	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	121	168	673	156	-	625	1176	-	_	1084	-	-
Mov Cap-2 Maneuver	121	168	-	156	-	-	-	-	-	-	-	-
Stage 1	459	418	-	553	-	_	_	-	_	-	-	-
Stage 2	411	515	-	390	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	26			29.8			0.4			2.2		
HCM LOS	D			23.0 D			J.⊣			۷.۲		
Minor Lane/Major Mvm	ıt	NBL	NBT	MRD	ERI n1\	VBLn1V	VRI n2	SBL	SBT	SBR		
Capacity (veh/h)	ı	1176	IND I	NON	219	156	625	1084	<u> </u>	JDK		
HCM Lane V/C Ratio		0.022		-			0.197			-		
		8.1	-	_	26	54.4	12.2	8.8	-	-		
HCM Control Delay (s) HCM Lane LOS		6. I	-	-	26 D	54.4 F	12.2 B	0.0 A		-		
HCM 95th %tile Q(veh)		0.1	-	-	0.8	2.9	0.7	0.4	-	-		
HOW SOUT MUTE W(VEIT)		0.1	-	_	0.0	2.3	0.1	0.4	-	_		

	۶	<b>→</b>	*	•	<b>←</b>	4	4	<b>†</b>	~	<b>/</b>	<del> </del>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	₽		ሻ	<b>↑</b>	7	ሻ	<b>₽</b>		ሻ	₽	
Traffic Volume (veh/h)	167	364	26	146	433	180	41	116	125	146	135	159
Future Volume (veh/h)	167	364	26	146	433	180	41	116	125	146	135	159
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	396	28	159	471	196	45	126	136	159	147	173
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	691	49	373	748	634	437	329	355	486	313	369
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	769	1726	122	963	1870	1585	1060	823	888	1117	783	921
Grp Volume(v), veh/h	182	0	424	159	471	196	45	0	262	159	0	320
Grp Sat Flow(s),veh/h/ln	769	0	1848	963	1870	1585	1060	0	1711	1117	0	1704
Q Serve(g_s), s	8.9	0.0	8.0	6.9	9.1	3.8	1.5	0.0	4.9	5.3	0.0	6.2
Cycle Q Clear(g_c), s	18.0	0.0	8.0	15.0	9.1	3.8	7.7	0.0	4.9	10.2	0.0	6.2
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.52	1.00		0.54
Lane Grp Cap(c), veh/h	312	0	739	373	748	634	437	0	684	486	0	682
V/C Ratio(X)	0.58	0.00	0.57	0.43	0.63	0.31	0.10	0.00	0.38	0.33	0.00	0.47
Avail Cap(c_a), veh/h	312	0	739	373	748	634	437	0	684	486	0	682
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	10.5	16.3	10.8	9.2	12.8	0.0	9.6	13.2	0.0	10.0
Incr Delay (d2), s/veh	2.7	0.0	1.1	8.0	1.7	0.3	0.5	0.0	1.6	1.8	0.0	2.3
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	1.9	0.0	2.6	1.3	3.1	1.0	0.4	0.0	1.8	1.4	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	11.6	17.1	12.5	9.5	13.3	0.0	11.2	15.0	0.0	12.3
LnGrp LOS	С	Α	В	В	В	Α	В	Α	В	В	Α	В
Approach Vol, veh/h		606			826			307			479	
Approach Delay, s/veh		14.6			12.7			11.5			13.2	
Approach LOS		В			В			В			В	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		9.7		20.0		12.2		17.0				
Green Ext Time (p_c), s		1.1		0.0		1.4		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			В									

Movement   EBL   EBT   EBR   WBL   WBT   WBL   NBT   NBL   NBT   NBR   SBL   SBT   SBR		۶	<b>→</b>	•	•	<b>←</b>	•	4	†	<b>/</b>	<b>/</b>	ļ	✓	
Traffic Volume (veh/h) 25 553 98 71 794 40 88 67 21 64 60 26  Future Volume (veh/h) 25 553 98 71 794 40 88 67 21 64 60 26  Initial O (Ob), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Future Volume (veh/m) 25 553 98 871 794 40 88 67 21 64 60 26 initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Lane Configurations				7		7				7			
Initial Q (Qb), veh														
Ped-Bike Adj(A_pbT)			553			794		88						
Parking Bus, Adj			0			0			0			0		
Work Zone On Ápproach	Ped-Bike Adj(A_pbT)													
Adj Sat Flow, vehi/hin 1870 1870 1870 1870 1870 1870 1870 1870	Parking Bus, Adj	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Adj Flow Rate, veh/h 27 601 107 77 863 43 96 73 23 70 65 28 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92														
Peak Hour Factor	Adj Sat Flow, veh/h/ln													
Percent Heavy Veh,														
Cap, veh/h OR Green OR O														
Arrive On Green         0.03         0.47         0.47         0.05         0.49         0.49         0.06         0.22         0.22         0.05         0.21         0.21           Sat Flow, weh/h         1781         1870         1585         1781         1870         1585         1781         1860         430         96         0         96         70         65         28           Grp Volume(v), veh/h         27         601         107         77         863         43         96         0         96         70         65         28           Grp Sat Flow(s), veh/h71781         1870         1585         1781         1870         1585         1781         1870         1585         1781         1870         1585         0         2.7         2.6         2.4         1.2         120         120         0         0         0.0         3.7         2.6         2.4         1.2         120         120         100         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00 </td <td></td>														
Sat Flow, veh/h         1781         1870         1585         1781         1870         1585         1781         1363         430         1781         1870         1585           Grp Volume(v), veh/h         27         601         107         77         863         43         96         0         96         70         65         28           Grp Sat Flow(s), veh/h/hn/1781         1870         1585         1781         1870         1585         1781         1870         1585         1781         1870         1585         1781         1870         1585         1781         1870         1585         28         6         0         96         70         65         28         6         28         6         0         98         1781         1870         1585         1781         1870         1585         28         6         0         1793         1781         1870         1585         28         6         0         20         180         24         12         12         12         20         180         180         180         180         180         180         180         180         180         180         180         180         180         18														
Grp Volume(v), veh/h														
Grp Sat Flow(s), veh/h/ln1781	Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1363	430	1781	1870	1585	
Q Serve(g_s), s	Grp Volume(v), veh/h	27	601	107	77	863	43	96	0	96	70	65	28	
Cycle Q Clear(g_c), s         0.7         21.5         3.3         1.9         37.3         1.2         3.5         0.0         3.7         2.6         2.4         1.2           Prop In Lane         1.00         1.00         1.00         1.00         1.00         1.00         1.00           Lane GFD Cap(c), veh/h         166         875         741         332         915         775         430         0         402         404         400         339           V/C Ratio(X)         0.16         0.69         0.14         0.23         0.94         0.06         0.22         0.00         0.24         401         0.08           Avail Cap(c_a), veh/h         221         959         813         349         959         813         343         0         402         426         400         339           HCM Platoan Ratio         1.00	Grp Sat Flow(s), veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1793	1781	1870	1585	
Prop In Lane	Q Serve(g_s), s	0.7	21.5	3.3	1.9	37.3	1.2	3.5	0.0	3.7	2.6	2.4	1.2	
Lane Grp Cap(c), veh/h 166 875 741 332 915 775 430 0 402 404 400 339  V/C Ratio(X) 0.16 0.69 0.14 0.23 0.94 0.06 0.22 0.00 0.24 0.17 0.16 0.08  Avail Cap(c_a), veh/h 221 959 813 349 959 813 433 0 402 426 400 339  HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Cycle Q Clear(g_c), s	0.7	21.5	3.3	1.9	37.3	1.2	3.5	0.0	3.7	2.6	2.4	1.2	
V/C Ratio(X)         0.16         0.69         0.14         0.23         0.94         0.06         0.22         0.00         0.24         0.17         0.16         0.08           Avail Cap(c_a), veh/h         221         959         813         349         959         813         433         0         402         426         400         339           HCM Platoon Ratio         1.00         1.0	Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00	
Avail Cap(c_a), veh/h 221 959 813 349 959 813 433 0 402 426 400 339 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Grp Cap(c), veh/h	166	875	741	332	915	775	430	0	402	404	400	339	
HCM Platoon Ratio	V/C Ratio(X)	0.16	0.69	0.14	0.23	0.94	0.06	0.22	0.00	0.24	0.17	0.16	80.0	
Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Avail Cap(c_a), veh/h	221	959	813	349	959	813	433	0	402	426	400	339	
Uniform Delay (d), s/veh 18.7	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	
Incr Delay (d2), s/veh	Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	
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.	Uniform Delay (d), s/veh	18.7	17.8	12.9	13.4	20.6	11.4	23.9	0.0	27.1	24.3	27.3	26.8	
%ile BackOfQ(50%),veh/lr0.3 8.8 1.1 0.7 18.6 0.4 1.5 0.0 1.7 1.1 1.2 0.5 Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh 19.2 19.6 13.0 13.8 37.3 11.5 24.2 0.0 28.5 24.5 28.2 27.3 LnGrp LOS B B B B B D B C A C C C C Approach Vol, veh/h 735 983 192 163 Approach Delay, s/veh 18.7 34.4 26.3 26.4 Approach LOS B C C C C Timer - Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 Max Green Setting (Gmax§.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7 Max Q Clear Time (g_c+114,6 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary HCM 6th Ctrl Delay 27.4	Incr Delay (d2), s/veh	0.5	1.8	0.1	0.4	16.7	0.0	0.3	0.0	1.4	0.2	0.9	0.5	
Unsig. Movement Delay, s/veh LnGrp Delay(d),s/veh 19.2 19.6 13.0 13.8 37.3 11.5 24.2 0.0 28.5 24.5 28.2 27.3 LnGrp LOS B B B B B D B C A C C C C Approach Vol, veh/h 735 983 192 163 Approach Delay, s/veh 18.7 34.4 26.3 26.4 Approach LOS B C C C C Timer - Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5 Max Green Setting (Gmax\$\frac{1}{2}\$.\$\frac{1}{2}\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7 Max Q Clear Time (g_c+114,6 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary HCM 6th Ctrl Delay 27.4	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	
LnGrp Delay(d),s/veh 19.2 19.6 13.0 13.8 37.3 11.5 24.2 0.0 28.5 24.5 28.2 27.3  LnGrp LOS B B B B B B D B C A C C C C  Approach Vol, veh/h 735 983 192 163  Approach Delay, s/veh 18.7 34.4 26.3 26.4  Approach LOS B C C C C  Timer - Assigned Phs 1 2 3 4 5 6 7 8  Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2  Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5  Max Green Setting (Gmax 5.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7  Max Q Clear Time (g_c+114, \$ 5.7 3.9 23.5 5.5 4.4 2.7 39.3  Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4	%ile BackOfQ(50%),veh	/lr0.3	8.8	1.1	0.7	18.6	0.4	1.5	0.0	1.7	1.1	1.2	0.5	
LnGrp LOS         B         B         B         B         B         B         B         D         B         C         A         C         C         C           Approach Vol, veh/h         735         983         192         163           Approach Delay, s/veh         18.7         34.4         26.3         26.4           Approach LOS         B         C         C         C           C         C         C         C         C           Timer - Assigned Phs         1         2         3         4         5         6         7         8           Phs Duration (G+Y+Rc), s8.5         23.6         8.7         44.3         9.5         22.7         6.9         46.2           Change Period (Y+Rc), s 4.5         4.5         4.5         4.5         4.5         4.5         4.5           Max Green Setting (Gmax 5.5         18.2         5.0         43.7         5.1         18.2         5.0         43.7           Max Q Clear Time (g_c+l14,6         5.7         3.9         23.5         5.5         4.4         2.7         39.3           Green Ext Time (p_c), s 0.0         0.3         0.0         4.2         0.0	Unsig. Movement Delay	, s/veh												
Approach Vol, veh/h Approach Delay, s/veh 18.7 34.4 26.3 26.4 Approach LOS B C C C C Timer - Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	LnGrp Delay(d),s/veh	19.2	19.6	13.0	13.8	37.3	11.5	24.2	0.0				27.3	
Approach Delay, s/veh Approach LOS B C C C C Timer - Assigned Phs 1 2 3 4 5 6 7 8 Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 Max Green Setting (Gmax 5.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7 Max Q Clear Time (g_c+I14, s 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary HCM 6th Ctrl Delay 27.4	LnGrp LOS	В	В	В	В	D	В	С	Α	С	С	С	С	
Approach LOS B C C C  Timer - Assigned Phs 1 2 3 4 5 6 7 8  Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2  Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5  Max Green Setting (Gmax\$\frac{1}{2}\$.\$\frac{1}{2}\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7  Max Q Clear Time (g_c+114,6 5.7 3.9 23.5 5.5 4.4 2.7 39.3  Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4	Approach Vol, veh/h		735			983			192			163		
Timer - Assigned Phs 1 2 3 4 5 6 7 8  Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2  Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5  Max Green Setting (Gmax§.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7  Max Q Clear Time (g_c+114,6 5.7 3.9 23.5 5.5 4.4 2.7 39.3  Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4	Approach Delay, s/veh		18.7			34.4			26.3			26.4		
Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5 Max Green Setting (Gmax).\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7 Max Q Clear Time (g_c+I14).\$ 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary HCM 6th Ctrl Delay 27.4	Approach LOS		В			С			С			С		
Phs Duration (G+Y+Rc), s8.5 23.6 8.7 44.3 9.5 22.7 6.9 46.2 Change Period (Y+Rc), s 4.5 4.5 4.5 4.5 4.5 4.5 4.5 Max Green Setting (Gmax).\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7 Max Q Clear Time (g_c+I14).\$ 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary HCM 6th Ctrl Delay 27.4	Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Max Green Setting (Gmax5.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7  Max Q Clear Time (g_c+I14.6 5.7 3.9 23.5 5.5 4.4 2.7 39.3  Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4		, s8.5												
Max Green Setting (Gmax§.\$ 18.2 5.0 43.7 5.1 18.2 5.0 43.7  Max Q Clear Time (g_c+I14,6 5.7 3.9 23.5 5.5 4.4 2.7 39.3  Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4	,													
Max Q Clear Time (g_c+I14, 6s 5.7 3.9 23.5 5.5 4.4 2.7 39.3 Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4 Intersection Summary  HCM 6th Ctrl Delay 27.4				5.0			18.2	5.0						
Green Ext Time (p_c), s 0.0 0.3 0.0 4.2 0.0 0.3 0.0 2.4  Intersection Summary  HCM 6th Ctrl Delay 27.4			5.7		23.5	5.5		2.7						
HCM 6th Ctrl Delay 27.4														
HCM 6th Ctrl Delay 27.4	Intersection Summary													
				27.4										
	HCM 6th LOS													

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	YVDL	T T	1\D1	TIDIT	JDL	<u> </u>
Traffic Vol, veh/h	8	12	484	9	13	463
Future Vol, veh/h	8	12	484	9	13	463
· · · · · · · · · · · · · · · · · · ·	0	0	0	0	0	403
Conflicting Peds, #/hr						Free
Sign Control	Stop	Stop	Free	Free	Free	
RT Channelized	-	None	-		-	None
Storage Length	0	0	-	-	100	-
Veh in Median Storage		-	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	9	13	526	10	14	503
Major/Minor	Minor1	N	/lajor1		Major2	
						0
Conflicting Flow All	1062	531	0	0	536	0
Stage 1	531	-	-	-	-	-
Stage 2	531	-	-	-	-	-
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	247	548	-	-	1032	-
Stage 1	590	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	244	548	-	-	1032	-
Mov Cap-2 Maneuver	379	-	-	-	-	-
Stage 1	590	_	_	_	_	_
Stage 2	582	_	_	_	_	_
Olago Z	002					
Approach	WB		NB		SB	
HCM Control Delay, s	12.9		0		0.2	
HCM LOS	В					
Minor Long/Major Myr	~ <del>t</del>	NDT	NDDV	MDI 54V	VDI 50	CDI
Minor Lane/Major Mvr	IIL	NBT		VBLn1V		SBL
Capacity (veh/h)		-	-	0.0		1032
HCM Lane V/C Ratio		-	-	0.023		
HCM Control Delay (s	)	-	-	14.7	11.7	8.5
HCM Lane LOS		-	-	В	В	Α
HCM 95th %tile Q(veh	1)	-	-	0.1	0.1	0

Intersection							
Int Delay, s/veh	2.9						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	T T		<u>₩</u>	₩DIX	JDL Š	7	
Traffic Vol, veh/h	110	<b>T</b> 617	<b>T</b> 841	67	59	100	
Future Vol, veh/h	110	617	841	67	59	100	
Conflicting Peds, #/hr	0	017	041	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	120	-	_	120	0	0	
Veh in Median Storage		0	0	-	0	-	
Grade, %	, <del>π</del> - -	0	0	_	0	-	
Peak Hour Factor	92	92	92	92	92	92	
	2	2	2	2	2	2	
Heavy Vehicles, %			914	73	64	109	
Mvmt Flow	120	671	914	73	04	109	
Major/Minor	Major1	N	Major2	ľ	Minor2		
Conflicting Flow All	987	0	-	0	1825	914	
Stage 1	-	-	-	-	914	-	
Stage 2	-	-	-	-	911	-	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	700	-	-	-	85	331	
Stage 1	-	-	-	-	391	-	
Stage 2	-	-	-	-	392	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	700	-	_	-	70	331	
Mov Cap-2 Maneuver	-	-	_	_	194	-	
Stage 1	-	_	-	_	324	_	
Stage 2	_	_	_	_	392	_	
A	ED		\A/D		O.D.		
Approach	EB		WB		SB		
HCM Control Delay, s	1.7		0		25.3		
HCM LOS					D		
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WBR :	SBLn1	3
Capacity (veh/h)		700	_	-	-	194	
HCM Lane V/C Ratio		0.171	-	-	_	0.331	0
HCM Control Delay (s)		11.2	-	-	_		_
HCM Lane LOS		В	-	-	_	D	
HCM 95th %tile Q(veh	)	0.6	_	-	-	1.4	
2 22 70 2(1011							

Int Delay, s/veh   6     Movement   EBL   EBR   NBL   NBT   SBT   SBR   Lane Configurations	Intersection						
Lane Configurations		6					
Lane Configurations		EDI	EDD	NDI	NDT	CDT	CDD
Traffic Vol, veh/h         20         100         110         22         50         22           Future Vol, veh/h         20         100         110         22         50         22           Conflicting Peds, #/hr         0         0         0         0         0         0         0           Sign Control         Stop         Stop         Free							אמט
Future Vol, veh/h         20         100         110         22         50         22           Conflicting Peds, #/hr         0         0         0         0         0         0           Sign Control         Stop         Stop         Free							22
Conflicting Peds, #/hr         Stop         Stop         Stop         Free         None         Cholor         Ander         Cholor	The second secon						
Sign Control         Stop RT Channelized         Stop None         Free         Free Free         Free Free Free Free RT Channelized         - None RT Channelized         - None         - None	<u>'</u>						
RT Channelized							
Storage Length							
Veh in Median Storage, #         0         -         -         0         0         -           Grade, %         0         -         -         0         0         -           Peak Hour Factor         92							None
Grade, %         0         -         -         0         0         -           Peak Hour Factor         92		-					-
Peak Hour Factor         92		-					
Heavy Vehicles, %   2   2   2   2   2   2   2   2   2	-						
Mynt Flow         22         109         120         24         54         24           Major/Minor         Minor2         Major1         Major2           Conflicting Flow All         330         66         78         0         0           Stage 1         66         -         -         -         -           Stage 2         264         -         -         -         -           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         -         -         -           Follow-up Hdwy         3.518         3.318         2.218         -         -         -           Stage 1         957         -         -         -         -         -           Stage 2         780         -         -         -         -           Mov Cap-1 Maneuver         612         998         1520         -         -         -           Stage							
Major/Minor         Minor2         Major1         Major2           Conflicting Flow All         330         66         78         0         0           Stage 1         66         -         -         -         -           Stage 2         264         -         -         -         -           Critical Hdwy         6.42         6.22         4.12         -         -         -           Critical Hdwy Stg 1         5.42         -         -         -         -         -         -           Critical Hdwy Stg 2         5.42         -         <							
Conflicting Flow All         330         66         78         0         -         0           Stage 1         66         - <t< td=""><td>Mvmt Flow</td><td>22</td><td>109</td><td>120</td><td>24</td><td>54</td><td>24</td></t<>	Mvmt Flow	22	109	120	24	54	24
Conflicting Flow All         330         66         78         0         -         0           Stage 1         66         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Conflicting Flow All         330         66         78         0         -         0           Stage 1         66         - <t< td=""><td>Maior/Minor</td><td>Minor2</td><td></td><td>Maior1</td><td>N</td><td>Maior2</td><td></td></t<>	Maior/Minor	Minor2		Maior1	N	Maior2	
Stage 1       66       -        -       -       -       -       -       -       -       -       -       -       -       -       -       -       -        -       -       -       -       -       -       -       -       -       -       -       -       -       -       -        - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>							0
Stage 2       264       -							
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         -         -           Follow-up Hdwy         3.518         3.318         2.218         -         -           Pot Cap-1 Maneuver         665         998         1520         -         -           Stage 1         957         -         -         -         -           Stage 2         780         -         -         -         -           Mov Cap-1 Maneuver         612         998         1520         -         -         -           Mov Cap-2 Maneuver         653         -         -         -         -         -         -           Stage 1         881         -         -         -         -         -         -           Stage 2         780         -         -         -         -         -         -           Approach         EB         NB         SB <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>				_	_	_	_
Critical Hdwy Stg 1         5.42         -				4 12	_		_
Critical Hdwy Stg 2         5.42         -	•			7.12	_		_
Follow-up Hdwy 3.518 3.318 2.218 Stage 1 957					_		_
Pot Cap-1 Maneuver         665         998         1520         - <td>, ,</td> <td></td> <td></td> <td>2 218</td> <td>_</td> <td>_</td> <td>_</td>	, ,			2 218	_	_	_
Stage 1         957         -						_	_
Stage 2         780         -	•			1020	_		_
Platoon blocked, %				_	_		_
Mov Cap-1 Maneuver         612         998         1520         - <td></td> <td>700</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td>_</td>		700	_	_	_		_
Mov Cap-2 Maneuver         653         -		612	908	1520	_		
Stage 1         881         -				1320	_		-
Stage 2         780         -				-	-		-
Approach         EB         NB         SB           HCM Control Delay, s         9.3         6.3         0           HCM LOS         A           Minor Lane/Major Mvmt         NBL         NBT EBLn1 EBLn2         SBT           Capacity (veh/h)         1520         - 653         998         -           HCM Lane V/C Ratio         0.079         - 0.033         0.109         -           HCM Control Delay (s)         7.6         - 10.7         9         -           HCM Lane LOS         A         - B         A         -				-	-	-	-
HCM Control Delay, s   9.3   6.3   0     HCM LOS	Stage 2	780	-	-	-	-	-
HCM Control Delay, s   9.3   6.3   0							
HCM Control Delay, s         9.3         6.3         0           HCM LOS         A           Minor Lane/Major Mvmt         NBL         NBT EBLn1 EBLn2         SBT           Capacity (veh/h)         1520         - 653         998         -           HCM Lane V/C Ratio         0.079         - 0.033         0.109         -           HCM Control Delay (s)         7.6         - 10.7         9         -           HCM Lane LOS         A         - B         A         -	Approach	EB		NB		SB	
Minor Lane/Major Mvmt         NBL         NBT EBLn1 EBLn2         SBT           Capacity (veh/h)         1520         - 653         998         -           HCM Lane V/C Ratio         0.079         - 0.033         0.109         -           HCM Control Delay (s)         7.6         - 10.7         9         -           HCM Lane LOS         A         - B         A         -		9.3		6.3		0	
Capacity (veh/h)       1520       - 653       998       -         HCM Lane V/C Ratio       0.079       - 0.033       0.109       -         HCM Control Delay (s)       7.6       - 10.7       9       -         HCM Lane LOS       A       - B       A       -		Α					
Capacity (veh/h)       1520       - 653       998       -         HCM Lane V/C Ratio       0.079       - 0.033       0.109       -         HCM Control Delay (s)       7.6       - 10.7       9       -         HCM Lane LOS       A       - B       A       -							
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HCM Lane LOS A - B A -				-			
				-			
HCM 95th %tile Q(veh) 0.3 - 0.1 0.4 -				-			
	HCM 95th %tile Q(veh)		0.3	-	0.1	0.4	-

Intersection Int Delay, s/veh						
	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	ሻ	7	ሻ	<b>†</b>	<b>1</b>	
Traffic Vol, veh/h	8	12	13	29	60	9
Future Vol, veh/h	8	12	13	29	60	9
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	0	100	-	-	-
Veh in Median Storage		-	-	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	9	13	14	32	65	10
IVIVIIICI IOW	J	10	17	02	00	10
Major/Minor	Minor2		Major1	N	//ajor2	
Conflicting Flow All	130	70	75	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	60	-	-	-	-	-
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	864	993	1524	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	963	-	-	-	_	_
Platoon blocked, %				_	_	
						_
-	856	993	1524	_	<u>-</u>	-
Mov Cap-1 Maneuver	856 856	993	1524	-	-	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	856	-	-	- -	- - -	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	856 944	-	-	- - -	- -	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver	856	-	-	-	-	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	856 944	-	-	- - -	- -	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1	856 944	-	-	- - -	- -	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2	856 944 963	-	- - -	- - -	- - -	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2	856 944 963 EB	-	- - - NB	- - -	- - - - SB	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s	856 944 963 EB 8.9	-	- - - NB	- - -	- - - - SB	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS	856 944 963 EB 8.9 A	-	- - - NB 2.3	-	- - - - SB 0	-
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn	856 944 963 EB 8.9 A	- - - NBL	- - - NB 2.3	- - - - EBLn1 E	- - - - SB 0	- - - - SBT
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h)	856 944 963 EB 8.9 A	- - - NBL 1524	- - - NB 2.3	- - - - - EBLn1 E	- - - - SB 0	- - - - SBT
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h) HCM Lane V/C Ratio	856 944 963 EB 8.9 A	- - - NBL 1524 0.009	- - - NB 2.3	EBLn1 E 856 0.01	SB 0	- - - - SBT
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	856 944 963 EB 8.9 A	NBL 1524 0.009 7.4	NB 2.3	EBLn1 E 856 0.01 9.2	- - - - SB 0 - - - 993 0.013 8.7	- - - - SBT - -
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2  Approach HCM Control Delay, s HCM LOS  Minor Lane/Major Mvn Capacity (veh/h) HCM Lane V/C Ratio	856 944 963 EB 8.9 A	- - - NBL 1524 0.009	- - - NB 2.3	EBLn1 E 856 0.01	SB 0	- - - - SBT



#### City of Santa Clara 2603 Santa Clara Drive (435) 656-4690, Ext. 225 imcnulty@sccity.org

Staff Report

# PDR Zone Amendment & Project Plan Review Summary and Recommendation

Public Body: Santa Clara Planning Commission

Meeting Date: June 26, 2025

**Current Zone:** Planned Development Residential, PDR Zone **General Plan Designation:** Mixed-Use Residential, MUR

Property Size: 7.35 acres

Property Location: North of Pioneer Parkway and west of Red Mountain Drive

Request: PDR Zone Amendment & Project Plan Review

Applicant Name: McKenna Christensen

**Staff Planner:** Jim McNulty **Meeting Type:** Public Hearing

### **PROJECT DESCRIPTION**

The applicant, McKenna Christensen, Cole West LLC, is requesting a PDR Zone Amendment & Project Plan Review for the undeveloped property just north of the intersection of Pioneer Parkway and Red Mountain Drive, and directly northeast of the Harmon's Shopping Center. The proposed Project Plan includes 58 two-story front-loaded townhome units, 12 three-story rear-loaded townhome units, 10 single-family lots, project amenities, and open space. A total of eighty (80) residential units are proposed on 7.35 acres

The **previous applicant for the subject property was Silverado LLC.** The Planning Commission may recall holding public hearings in both 2022 and 2023 which included a Property Rezoning and Project Plan Review. The previous plans included a small amount of commercial along Pioneer Parkway, an Apartment Complex, and Mancaves Units which included a second story living space.

**Chapter 17.68, Planned Development Zones,** requires a review of the Project Plan including, residential unit count, building design and materials, project amenities, public trail access, open space, landscaping, parking, roads/private driveways, fencing, signage, as well as other necessary items for a multi-family residential project. Staff will further discuss the proposed project and requirements in the report.

#### PROJECT PLAN REVIEW ITEMS

City staff have worked with the applicant on several items associated with the Project Plan. The following includes information on each item as required by Chapter 17.68, Planned Development Zone:

- 1. Residential Unit Count: The Project Plan includes a total of eighty (80) residential units. This includes 58 two-story front-loaded townhome units, 12 three-story rear-loaded units, and 10 small single-family lots. The subject property is 7.35 acres in size. This equates to a project density of 10.9 units/acre. Although a Phasing Plan has been submitted, City staff recommends that one also be included in the preliminary subdivision plat submittal as it's likely the project will be developed in two phases. A copy of the Project Plan is attached.
- 2. **Density Bonus:** The Project Plan includes **a density of 10.9 units per acre.** A density bonus of 2.9 units per acre has been requested by the applicant. The base density in the PDR Zone is 8 units per acre. Chapter 17.68.050 of city code requires the following criteria: Exceptional Building Design & Materials (see Item #3), Site Design (see Project Plan), Landscaping (see Item #7), and Project Amenities (see Items #4).
- 3. **Building Design/Materials/Height/Setbacks:** The proposed buildings include a two-story front-loaded townhome unit, a three-story rear-loaded townhome unit, and single-family detached units.
  - a. Front-Loaded Units (58). Each unit will include 3 or 4 bedrooms, 2.5 bathrooms, and a two-car garage. Units will range from 1,550 to 1,850 square feet in size. Exterior building materials include a brick wainscot, stucco, and asphalt shingles roofs. The two-story townhomes will be approximately 26' in height. Building setbacks will be as follows: Front yard setback minimum of 20' (minimum driveway depth of 20' required), side yard setback minimum of 12' between buildings or 15' from right-of-way for a corner unit, with a rear yard setback minimum of 10'. Copies of the proposed Building Elevations (3) are attached.
  - b. Rear-Loaded Units (12). Each unit will include 4 bedrooms, 3.5 bathrooms, and a two-car garage. Units will range from 1,800 to 1,850 square feet in size. Exterior building materials include brick, stucco, and asphalt shingle roofs. The three-story townhomes will be approximately 34' in height. Building setbacks will be as follows: Front yard setback minimum of 10' from roadway, side yard setback minimum of 12' between buildings, with a rear yard setback of 20' minimum (minimum driveway depth of 20' required). A copy of the proposed Building Elevations is attached.
  - c. Single-Family Lots (10). The small lot single-family area will allow for both ramblers and two-story homes with a two-car garage. A building elevation for a typical home was submitted; however, additional details on these homes will be required with the preliminary subdivision plat application. Building setbacks will be as follows: Front yard setback minimum of 20' (minimum driveway depth of 20' required), side yard setback minimum of 5' per side, with a rear yard minimum setback of 10'.
- 4. **Project Amenities: Chapter 17.68 requires project amenities** including recreation facilities such as tennis courts, playground equipment, swimming pool, clubhouse, and other common amenities such as a gazebo, outdoor cooking/eating areas, walkways, etc. The **Project Plan includes** a dog park with a shade structure, picnic area with a pavilion, playground with a shade structure, and fire pit with outdoor seating. Additionally, open space and walking paths have been provided for future residents.

Request: Red Mountain Row Residential Project

- 5. Public Trail Access: An existing 10' multi-use trail is in place just north of the subject property. The City will install the section of trail shown on the Project Plan (attached). This is the Lava Flow Trail that's required as per the 2018 Trails Master Plan.
- 6. **Open Space:** Chapter 17.68 requires at least **30% of a project to be in common area open space.** The Project Plan **includes 32% (2.30 acres) of open space** for the project. The applicant will be required to work with City staff during the preliminary subdivision plat review to verify these calculations.
- 7. **Project Landscaping:** The final landscape and irrigation plans will be required to comply with **Ordinance #2024-02 (Water Efficient Landscaping & Conservation Standards).** The applicant will be required to work with City staff during the preliminary subdivision plat review on this item.
- 8. **Outdoor Lighting:** Chapter 17.68.040 indicates that all outdoor lighting shall not adversely impact surrounding residential uses. All lighting shall be shielded and directed downward to avoid light spill. Lighting details will need to be provided with the preliminary subdivision plat submittal.
- 9. **Public Road/Private Driveway Design:** The Project Plan includes a **45' public right-of-way** running through the center of the project connecting Rachel Drive with Red Mountain Drive. This public road cross-section includes 30' of pavement, 2.5' of curb and gutter on each side, with a 5' sidewalk on each side of the road. The Project Plan also includes **a 26' private driveway with a 5' sidewalk** on one side providing access to both front-loaded and rear-loaded townhomes. The private driveway provides access to 34 townhome units. Additional public road and private driveway details (cross-sections) will be required at preliminary subdivision plat submittal.
- 10. Required Parking: The project is required to have a minimum of 160 parking spaces (80 covered, 80 uncovered) for the proposed residential development as per Chapter 17.32. The Project Plan also includes 10 guest parking spaces, as well as two car garages and two car driveways for each proposed unit. It appears that sufficient parking is proposed for the project.
- 11. **Fencing:** Project fencing will likely be placed between the commercial and residential projects. If so, additional information and details will need to be determined during the Preliminary Subdivision Plat review and/or Site Plan review process.
- 12. **Water Availability:** The applicant is required to obtain a will-serve letter or other verified documentation from the Washington County Water Conservancy District, WCWCD, prior to obtaining a building permit.
- 13. **Project Signage/Entry Feature:** No project signage/entry feature design has been submitted for review. The applicant has indicated that these features will be proposed at the intersections with Rachel Drive and Red Mountain Drive. This detail should be submitted with the preliminary subdivision plat.
- 14. Road Maintenance Fund & CC&Rs: City staff recommends that a Road Maintenance Fund be established by the applicant for the future maintenance of the private driveway within the project. This may include future slurry seals, crack sealing, pothole repairs, and other general maintenance as needed. The Road Maintenance Fund provisions may be a separate document or included within the CC&Rs for the project. The project CC&Rs will need to be reviewed and approved by City staff prior to final plat recordation.
- 15. **Project Narrative:** The applicant has submitted a project narrative for your review and consideration (copy attached).

#### **NEIGHBORHOOD RESPONSE**

Notices were sent to the property owners within 300' of the subject property. The subject property was also posted as per State Code. No responses have been received by City staff as of the writing of this report.

#### STATE CODE CONSIDERATIONS

Utah Code, Section 10-9a-205, includes requirements for a zoning map amendment. To amend the PDR Zone, the city must hold at least one public hearing. Additionally, a public hearing to consider a PDC Zone Amendment requires 10 days' notice rather than 24 hours' notice. A notice must be sent to all property owners within 300' of the subject property, with a notice in a visible location, with a sign of sufficient size and durability. The city is also required to post on the State Public Notice website. City staff have determined that all State Code requirements have been met with this application.

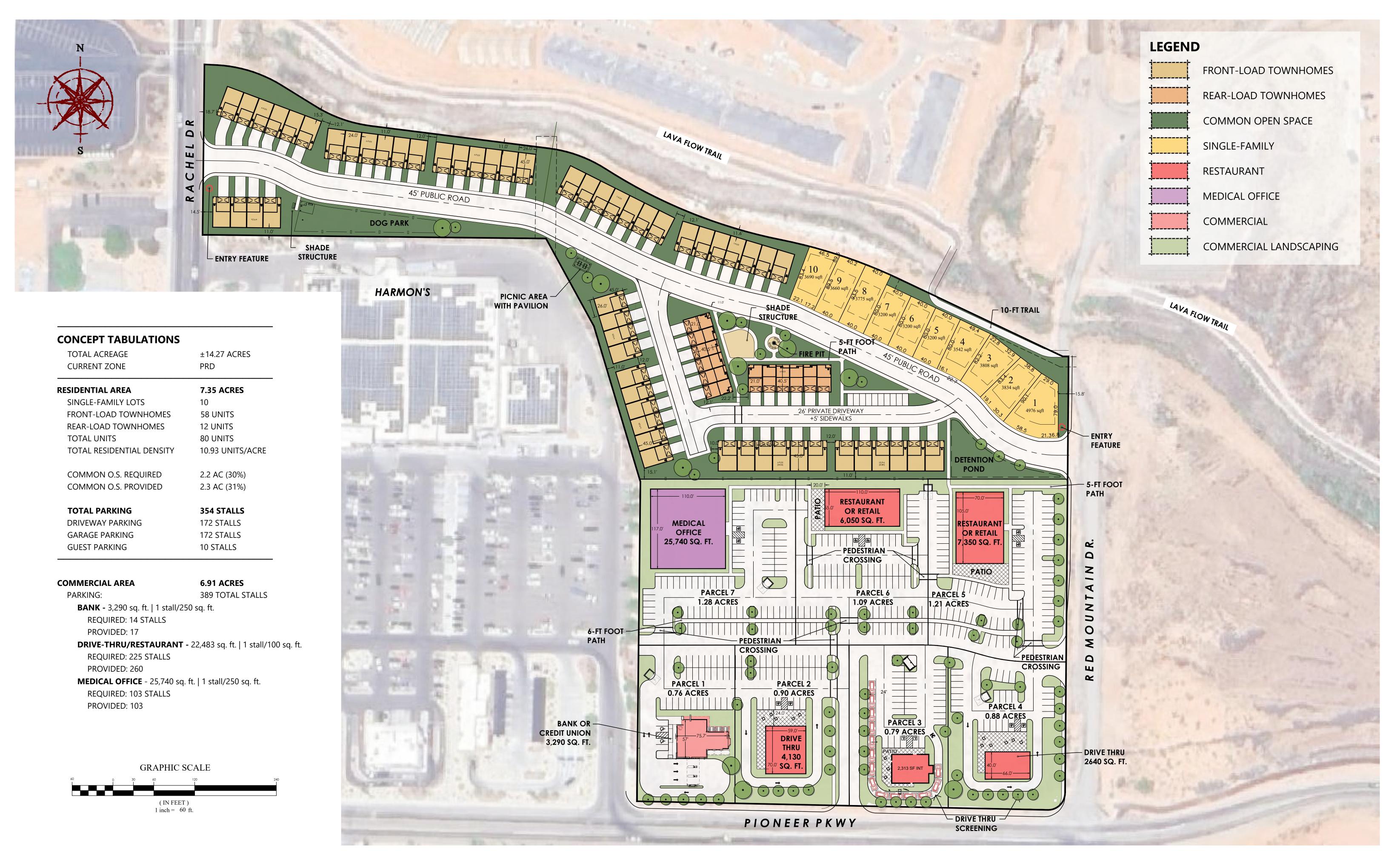
#### CITY STAFF RECOMMENDATION

City staff recommends that the Planning Commission review the submitted PDR Zone Amendment Application and Project Plan to determine if the application is complete. If the application is determined to be complete, City staff would recommend that the Planning Commission forward a recommendation to the City Council for their review and consideration of the application subject to the following conditions:

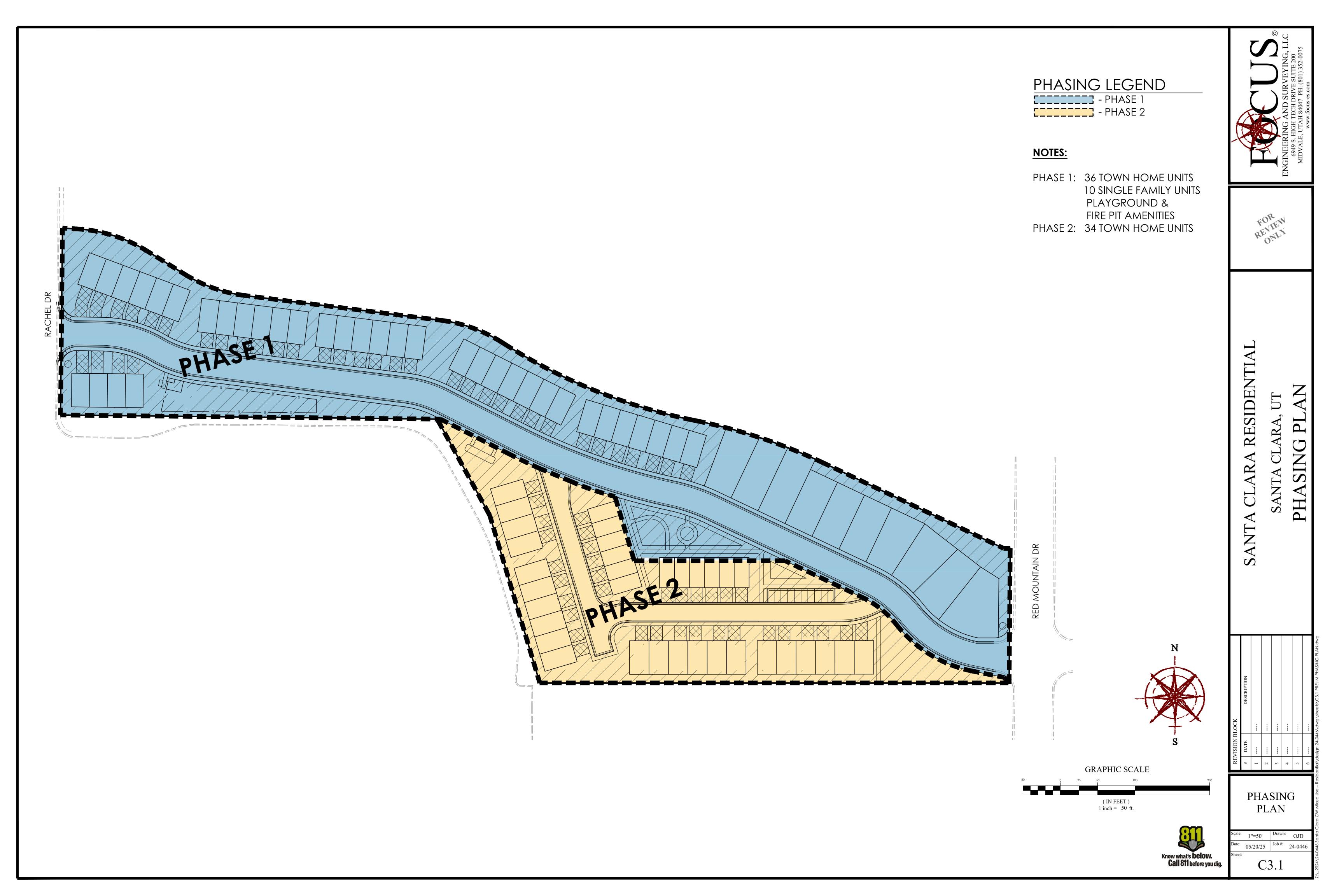
- 1. That the applicant be required to go through the Subdivision Review process for each project phase, overall preliminary plat & final plat(s).
- 2. That a total of eighty (80) units on 7.35 acres be allowed as per the Project Plan. This equates to a density of 10.9 units/acre.
- 3. That a Project Phasing Plan is required for the overall project. That the Phasing Plan be reviewed at preliminary subdivision plat submittal for compliance with each project phase.
- 4. That the building design/materials/colors/height/and setbacks comply with the Project Plan as presented by the applicant. That substantial changes to these items require an amendment to the Project Plan.
- 5. That at least 30% of the project area is in common open space. The Project Plan includes approximately 32.0% (2.30 acres) of open space.
- 6. That the project amenities be provided and put in place as per the Project Plan and Phasing Plan.
- 7. That the required 10' public multi-use trail (2018 Trails Master Plan) as shown on the Project Plan be installed by the City. That this detail be shown on the preliminary subdivision plat submittal.
- 8. That the applicant is required to comply with City Ordinance #2024-02, Water Efficient Landscaping & Conservation Standards. That this information be provided with the preliminary subdivision plat submittal.
- 9. That outdoor lighting details be provided with the preliminary subdivision plat submittal.
- 10. That a 45' public right-of-way running through the center of the project connecting Rachel Drive with Red Mountain Drive is required. That a 26' private driveway with a 5' sidewalk on one side be allowed providing access to front-loaded and rear-loaded townhomes. That additional cross-section information is required at preliminary subdivision plat submittal.
- 11. That a minimum of 160 parking spaces for the 80 residential units (two car garages and two car driveways) be provided along with 10 guest parking spaces adjacent to the amenity areas as per the Project Plan.
- 12. That project fencing information be provided with the preliminary subdivision plat submittal.
- 13. That the applicant be required to obtain a will-serve letter or other verified documentation from the Washington County Water Conservancy District, WCWCD prior to obtaining a building permit.

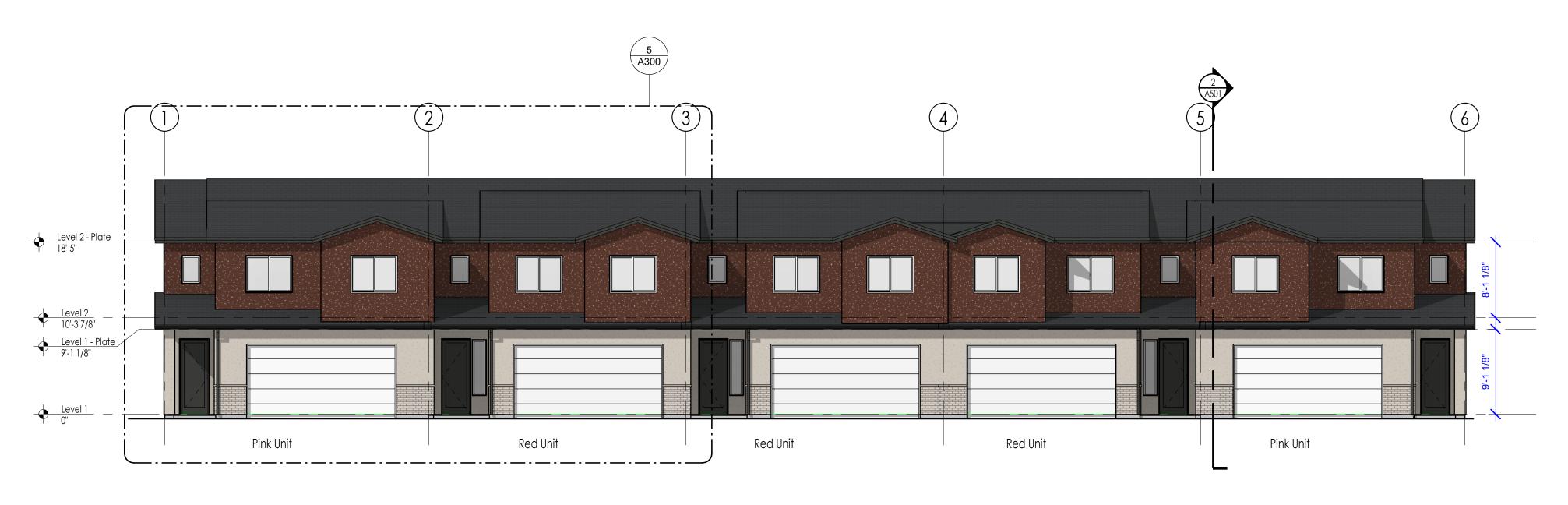
Request: Red Mountain Row Residential Project

- 14. That project signage/entry feature details be submitted with the preliminary subdivision plat.
- 15. That a Road Maintenance Fund be established by the applicant for the future maintenance of the private driveways within the project. That this document be submitted to City staff for review and approval prior to final plat recordation.
- 16. That project CC&Rs be submitted to City staff for review and approval prior to final plat recordation.



# SANTA CLARA MIXED USE concept K





1 Front 1/8" = 1'-0"



Front - Enalrged Elevation

1/4" = 1'-0"

## **GENERAL NOTES**

- A. Provide an address on the building which is assigned by the City Engineering Department. If the space is subdivided then the unit number or letter shall be placed on or near the entrance of the unit. These numbers and letters shall be visible from the street and be a minimum 6 inches high and a stroke of ½ inch. Address numbers shall be Arabic numbers or alphabetical letters. This
- address shall be contrasting color of the background.

  B. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material and shall not have openings into the garage per IRC R302.5.2.

### **ELEVATION KEY NOTES**

- 1 STUCCO FINISH SYSTEM COLOR PER SELECTION SHEET
- 2 WINDOWS & DOORS PER SELECTION SHEET
- 3 THIN BRICK VENEER PER SELECTION SHEET4 CONCRETE FOUNDATION BELOW GRADE
- 5 FINISHED GRADE
- 6 AC UNIT & PAD PER SPEC SHEET
- 7 1" DECORATIVE STUCCO BAND COLOR PER SELECTION SHEET
- 8 PREMANUFACTURED ALUMINUM PERGOLA
- 9 TILE ROOFING COLOR PER SELECTION SHEET
   10 CEMENT FIBER PANEL SIDING W/ 1" VERTICAL & HORIZ. TRIM
- AS SHOWN

  11 STUCCO SOFFIT AND FASCIA
- 12 PROVIDE RAIN GUTTERS AND DOWNSPOUTS AT LOWER ROOF

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BLDG. TYPE 'B' (5-PLEX)

REVISION SCHEDULE				
#	REVISION	DATE		

PLAN: **Building B (5-Plex)**ELEVATION:
DATE: **02/09/2024** 

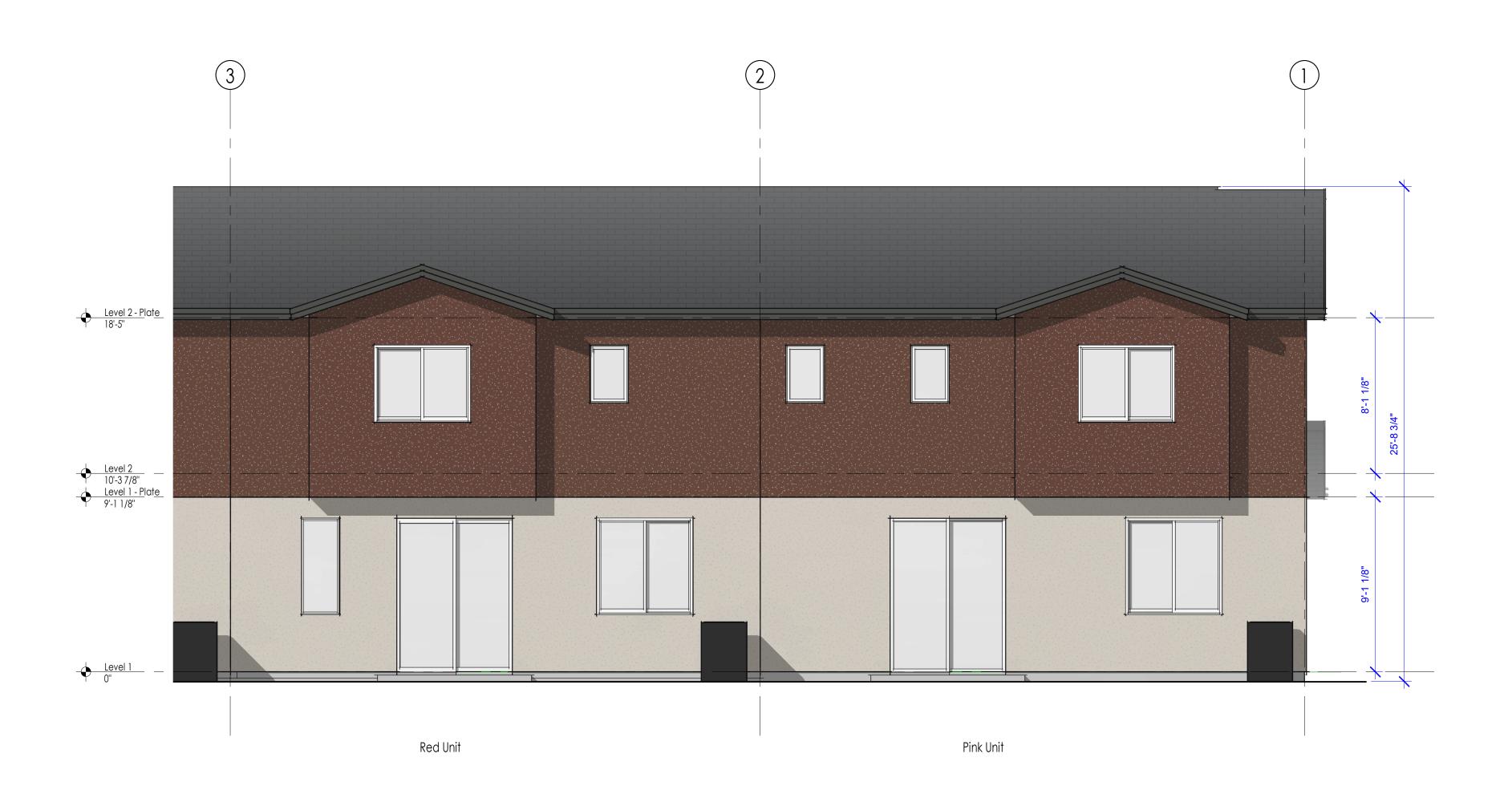
SHEET NAME + NUMBER:

**Elevations** 

A300



1 Rear



Rear - Enlarged Plan

1/4" = 1'-0"

### **GENERAL NOTES**

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- B. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material and shall not have openings into the garage per IRC R302.5.2.

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BLDG. TYPE 'B' (5-PLE)
RED MOUNTAIN

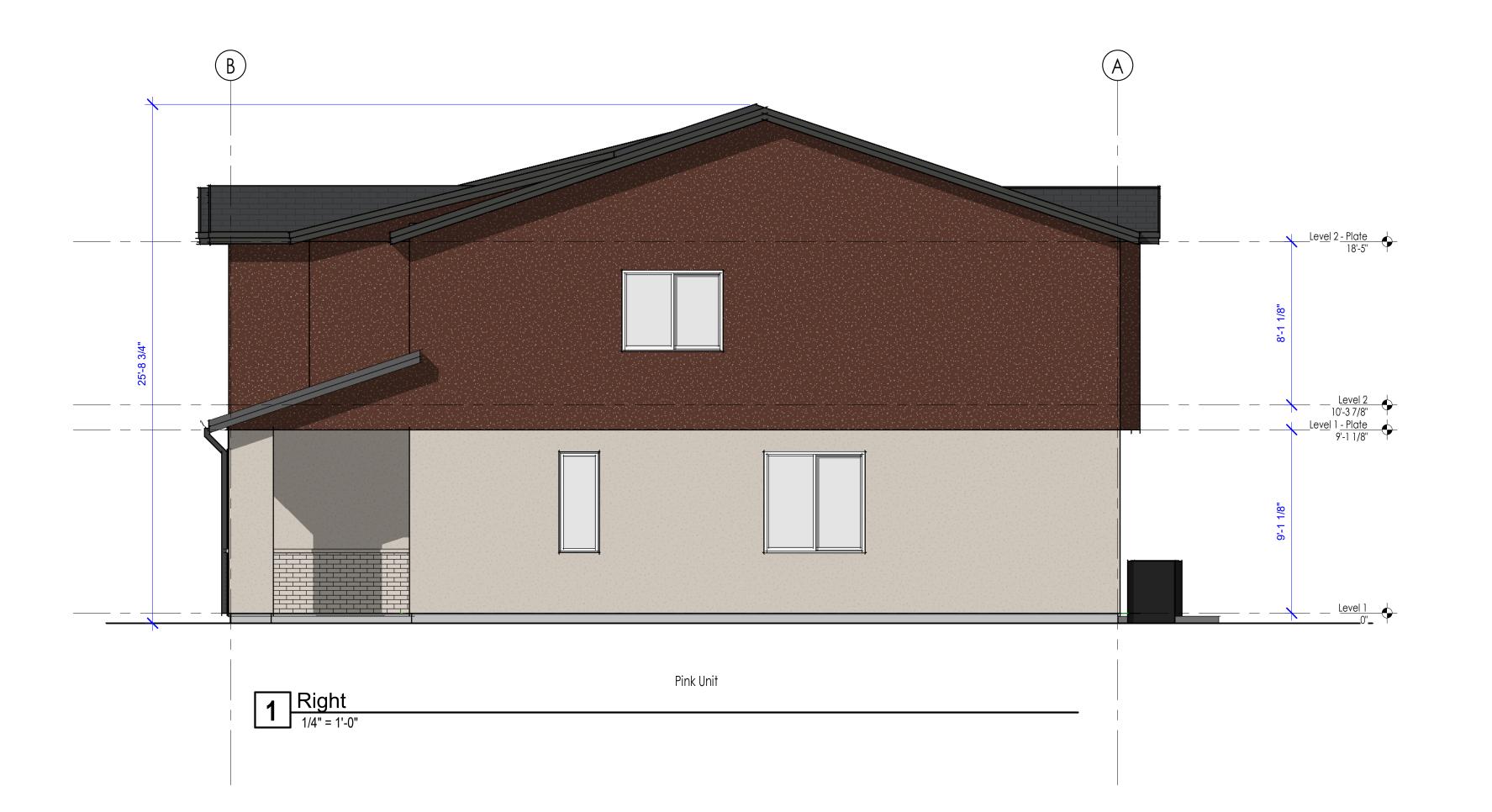
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#	REVISION	DATE		
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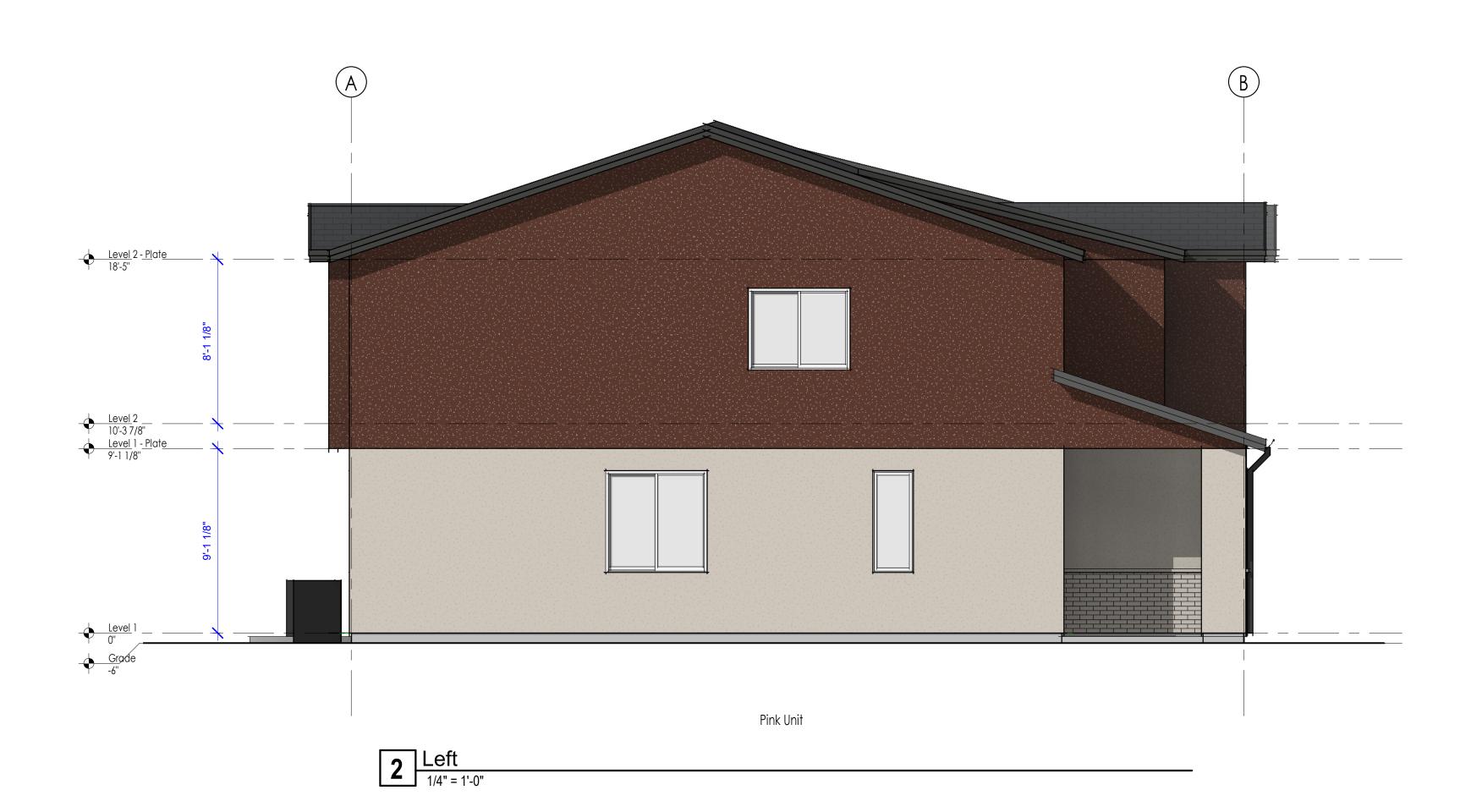
PLAN: **Building B (5-Plex)**ELEVATION:
DATE: **02/09/2024** 

SHEET NAME + NUMBER:

**Elevations** 

**A301** 





## **GENERAL NOTES**

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  B. Ducts in the garage and ducts penetrating the walls or
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- 3 THIN BRICK VENEER PER SELECTION SHEET 4 CONCRETE FOUNDATION BELOW GRADE
- 5 FINISHED GRADE
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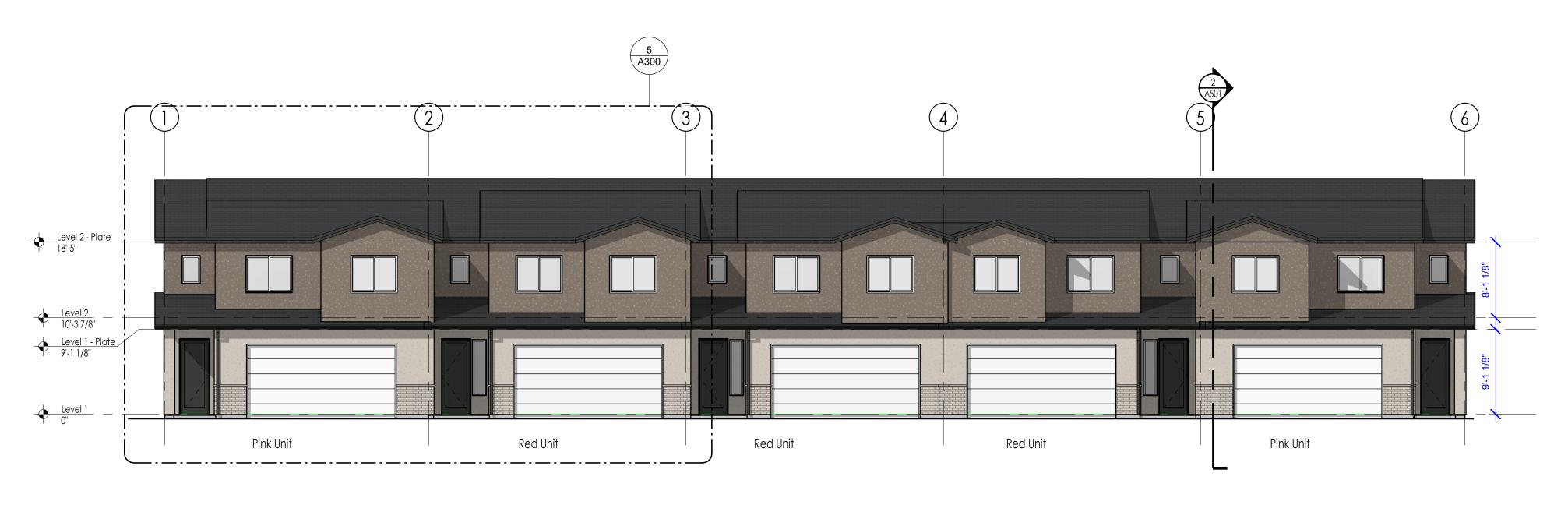
(5-PLEX) <u></u> BLDG.

REVISION SCHEDULE						
# REVISION DA						

PLAN: Building B (5-Plex) ELEVATION: DATE: **02/09/2024** 

SHEET NAME + NUMBER:

**Elevations** 



1 Front 1/8" = 1'-0"



Front - Enalrged Elevation

1/4" = 1'-0"

## **GENERAL NOTES**

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BLDG. TYPE 'B' (5-PLEX)

REVISION SCHEDULE
# REVISION DATE

PLAN: **Building B (5-Plex)**ELEVATION:
DATE: **02/09/2024** 

SHEET NAME + NUMBER:

**Elevations** 

A300



1 Rear



Rear - Enlarged Plan

1/4" = 1'-0"

## **GENERAL NOTES**

- A. Provide an address on the building which is assigned by the City Engineering Department. If the space is subdivided then the unit number or letter shall be placed on or near the entrance of the unit. These numbers and letters shall be visible from the street and be a minimum 6 inches high and a stroke of ½ inch. Address numbers shall be Arabic numbers or alphabetical letters. This address shall be contrasting color of the background.
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### **ELEVATION KEY NOTES**

- 1 STUCCO FINISH SYSTEM COLOR PER SELECTION SHEET
- 2 WINDOWS & DOORS PER SELECTION SHEET
- 3 THIN BRICK VENEER PER SELECTION SHEET4 CONCRETE FOUNDATION BELOW GRADE
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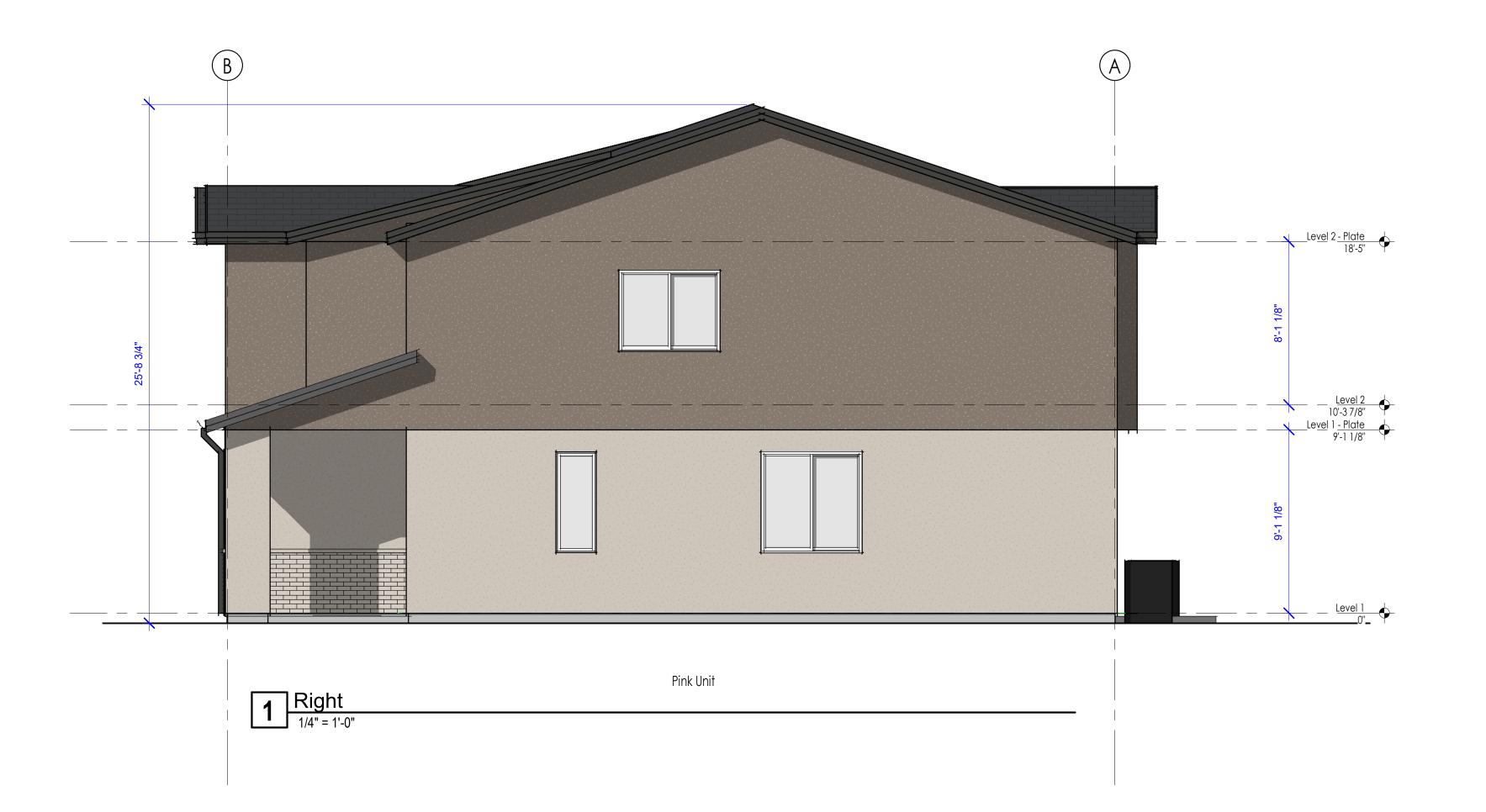
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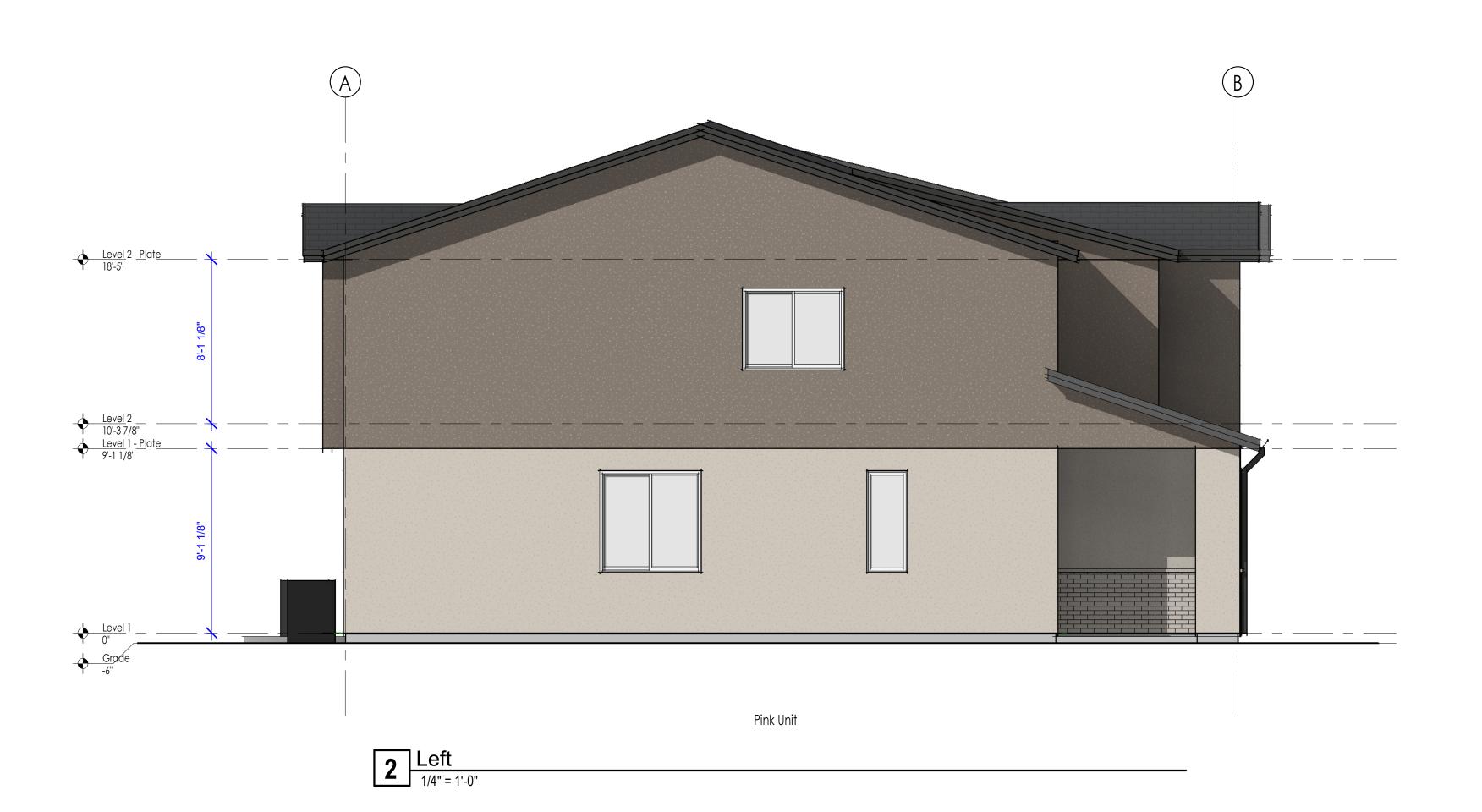
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**A301** 





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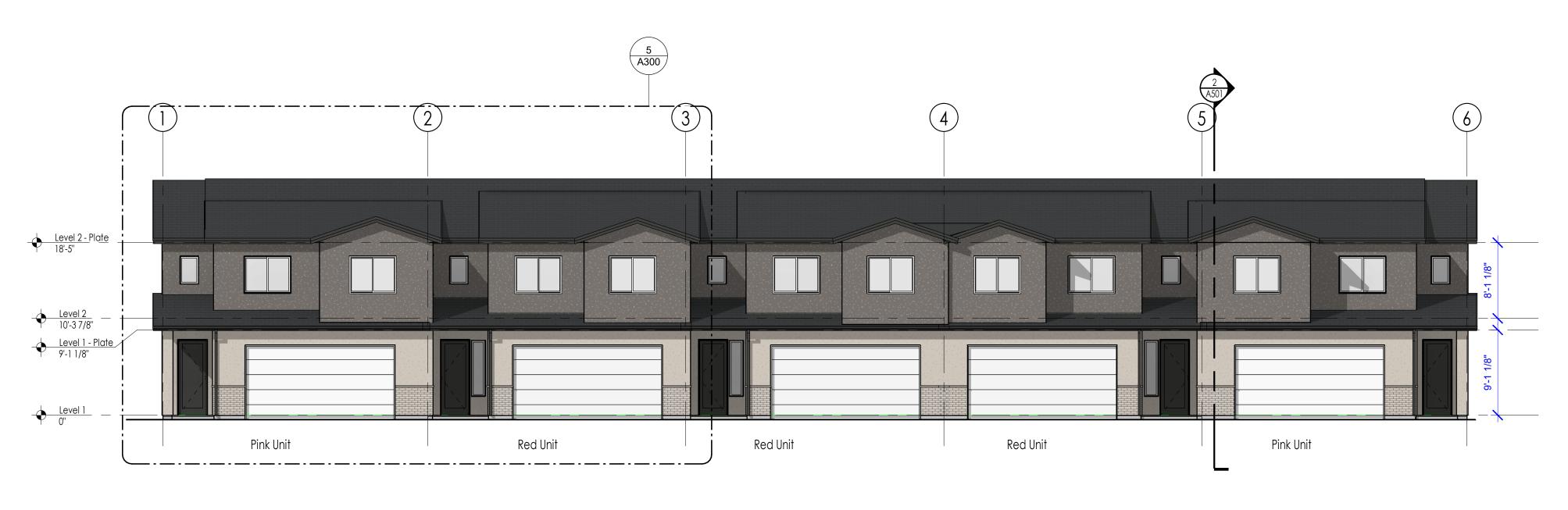
	REVISION SCHEDULE						
#	# REVISION DATE						

PLAN: **Building B (5-Plex)**ELEVATION:
DATE: **02/09/2024** 

SHEET NAME + NUMBER:

**Elevations** 

**A302** 



1 Front 1/8" = 1'-0"



Front - Enalrged Elevation

1/4" = 1'-0"

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PLAN: **Building B (5-Plex)**ELEVATION:
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SHEET NAME + NUMBER:

**Elevations** 

A300



1 Rear



Rear - Enlarged Plan

1/4" = 1'-0"

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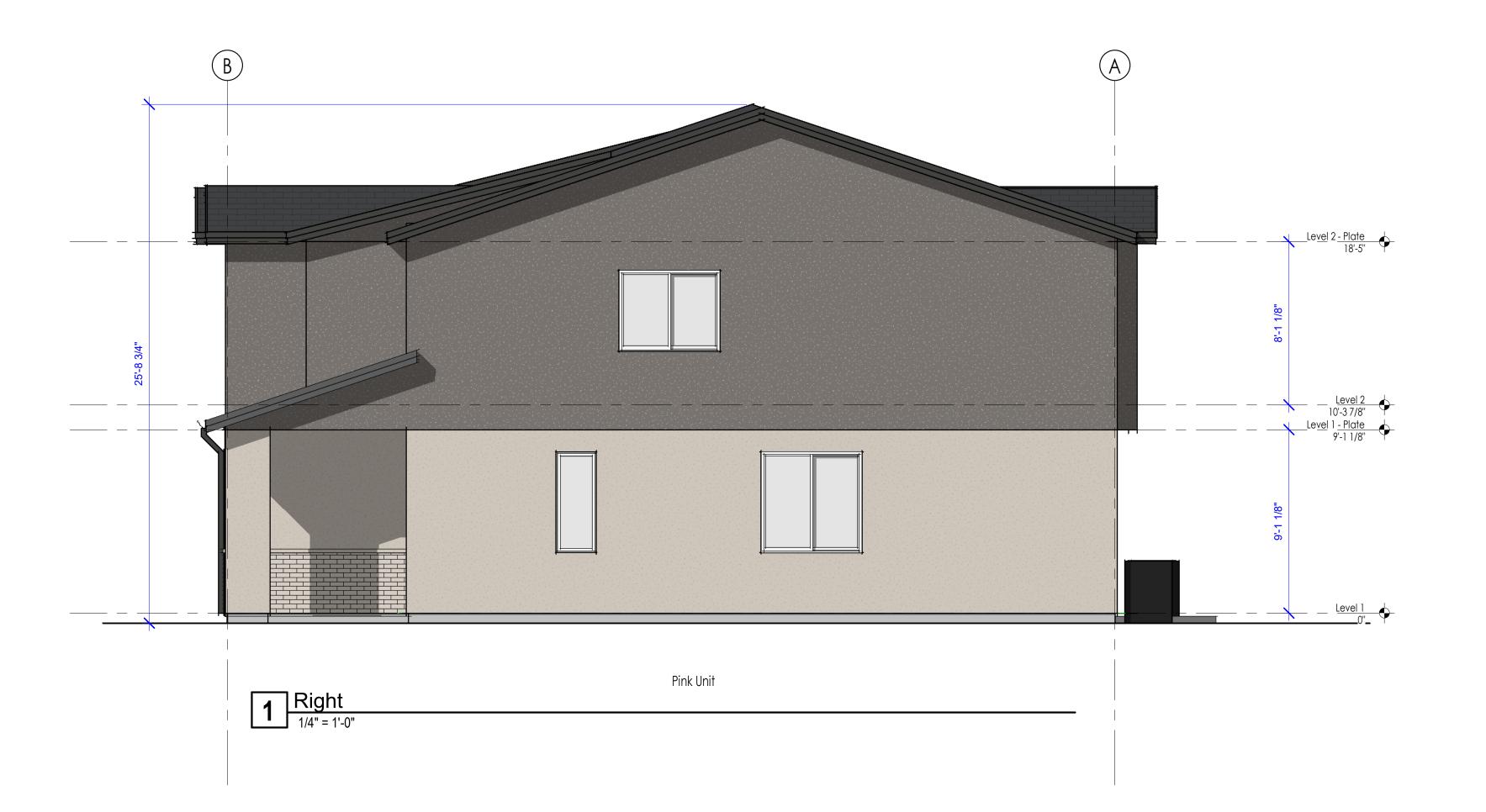
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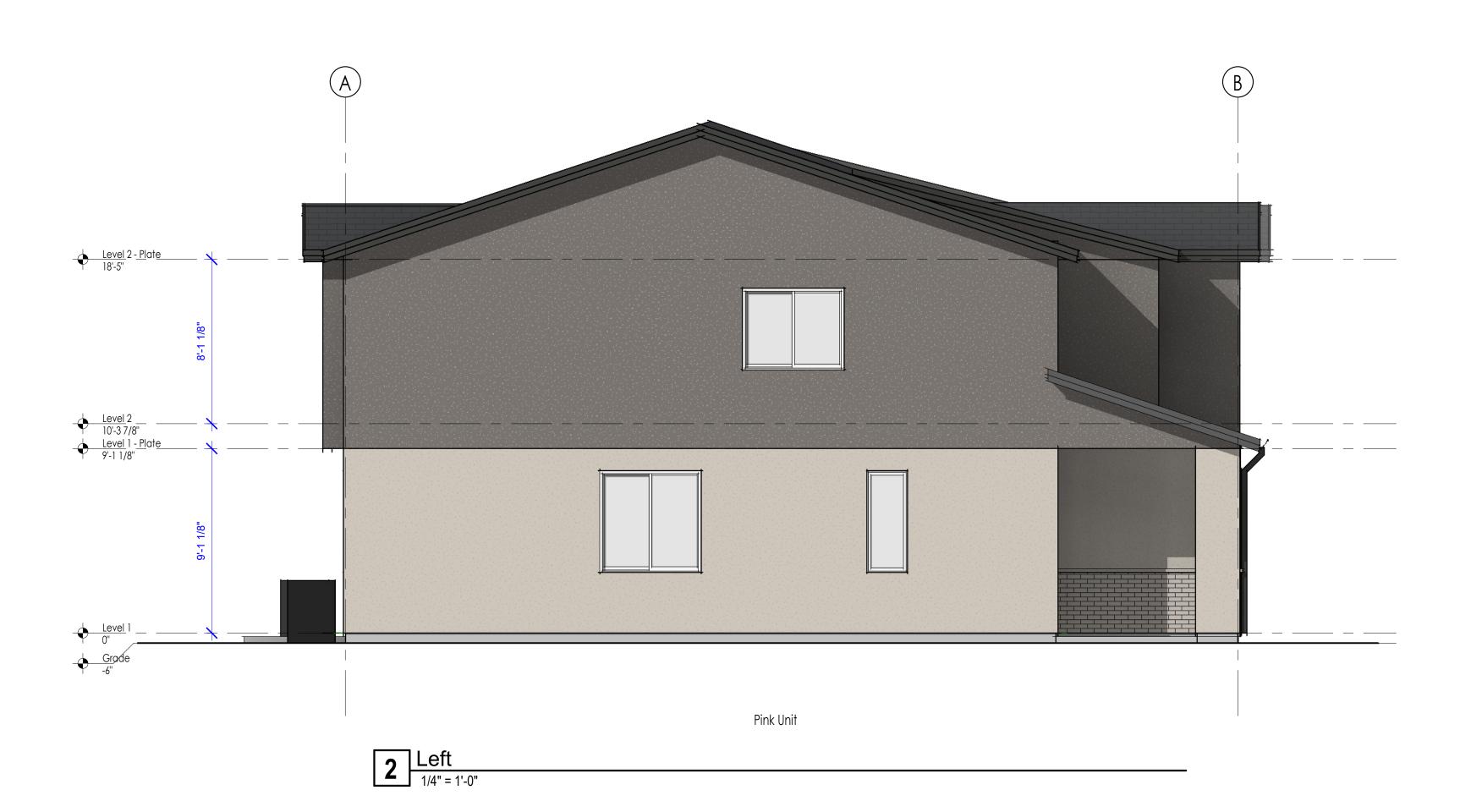
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**Elevations** 

**A301** 





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SHEET NAME + NUMBER:

**Elevations** 

**A302** 

Level 3 Plt. 28' - 4 5/8" Level 3 Level 2 Plt. 19' - 2 7/8" Level 2 Level 1 Plt. 9' - 1 1/8" Level 1 0" 1 FRONT ELEVATION
3/16" = 1'-0" 5 6 Level 3 Plt. 28' - 4 5/8" 20' - 3 1/2" Level 2 Plt. 19' - 2 7/8" Level 2 - 1 3/4" Level 1 Plt. 9' - 1 1/8" Level 1 REAR ELEVATION

3/16" = 1'-0"

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PROJECT RED MOUNTAIN

REVISIONS:

FRONT / REAR ELEVATIONS

SHEET:

A300

DATE: 3/6/2025 5:03:21 PM



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PROJECT RED MOUNTAIN

REVISIONS:

TITLE:

RIGHT / LEFT ELEVATIONS

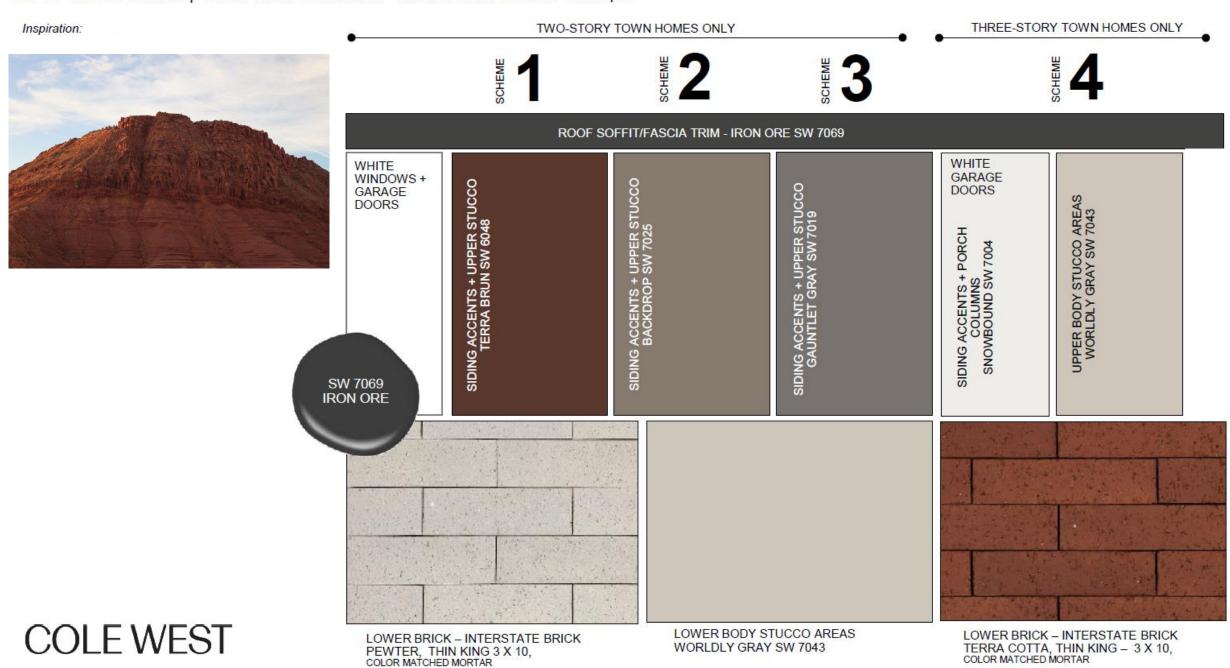
SHEET:

A301

DATE: 3/6/2025 5:03:27 PM







JUNE 12, 2025

#### RED MOUNTAIN ROW RESIDENTIAL DEVELOPMENT

Cole West desires to develop 7.35 acres of land located between Red Mountain Drive and Rachel Drive into a forsale, owner-occupied residential townhome development under the Planned Development Residential zone. The proposed residential development would include 80 residential units.

The proposed townhomes include 58 two-story front-load units, 12 three-story rear-load units, and 10 single-family detached units for a total of 80 units and 10.9 dwelling units to the acre. The two and three-story options add both architectural variation and a diverse option of housing for different sized families and life stages. We are requesting a density bonus of 2.9 dwelling units per acre. A total of 2.3 acres, or 32% of the development will be used as open space. The open space will include community amenities such as a dog park, fire pit, picnic area, playground, and pavilion. Each dwelling unit will contain a 2-car garage and 20' private driveways. 10 guest parking stalls are planning for the site for a total of 354 parking stalls. The proposed architectural elevations include brick and stucco with asphalt shingle roofs.

Cole West is requesting a reduction in rear setbacks on the front-loaded townhome units in order to accommodate the location of the public connector road between Red Mountain Drive and Rachel Drive and the proposed commercial area. Rear setbacks are currently shown at 11'.

Warm Regards,

McKenna Christensen

Director of Development | Cole West

McKenna Christensen

mckenna@colewest.com



#### City of Santa Clara 2603 Santa Clara Drive (435) 656-4690, Ext. 225 jmcnulty@sccity.org

Staff Report

# **Subdivision Plat Amendment Summary and Recommendation**

Public Body: Santa Clara Planning Commission

Meeting Date: June 26, 2025

**Current Zone:** Planned Development Residential PDR

**Property Address:** Intersection of Pioneer Parkway and Red Mountain Drive

Request: Plat Amendment for Lots 1, 2, and 3 of the Silverado Santa Clara Subdivision

Applicant Name: McKenna Christensen, Cole West LLC

**Staff Planner:** Jim McNulty

City Staff Recommendation: Approve with conditions

**Meeting Type:** Public Meeting

#### PROJECT DESCRIPTION

The applicant, **McKenna Christensen**, **Cole West LLC**, **is requesting a Plat Amendment** for the Silverado Santa Clara Subdivision. The applicant is proposing to amend Lots 1, 2, and 3 of the original Silverado Santa Clara Subdivision. The proposed Plat Amendment would include 2 lots instead of 3 lots. A copy of the original subdivision plat along with the proposed amended subdivision plat is attached for your review.

Lot 1 is proposed at 7.35 acres. Cole West LLC is proposing to develop this property with eighty (80) residential dwelling units. Lot 2 is proposed at 6.91 acres. Cole West LLC is proposing to develop this property with seven (7) retail/commercial building pads.

### SITE & VICINITY DESCRIPTION

The subject property is in the northern part of the City, at the intersection of Pioneer Parkway and Red Mountain Drive.

### **ISSUES OF CONCERN/PROPOSED MITIGATION**

No issues of concern have been identified for this application.

Request: Plat Amendment

### **NEIGHBORHOOD RESPONSE**

Notices were sent to the property owners within the Silverado Santa Clara Subdivision. No responses have been received by City staff as of the writing of this report.

#### REVIEWING DEPARTMENTS

**DEPARTMENT:** Building

Recommendations: A geotechnical report will be required for each building at the time of building permit

submittal.

Required Revisions: None at this time.

**DEPARTMENT:** Parks & Recreation

Recommendations: N/A Required Revisions: N/A

**DEPARTMENT:** Police & Fire

Recommendations: N/A Required Revisions: N/A

**DEPARTMENT**: Power

Recommendations: Public Utility Easements (PUE's) are required to be shown on the final plat.

Required Revisions: None at this time.

**DEPARTMENT:** Public Works

Recommendations: Public Utility Easements (PUE's) must be shown on the final plat. A 10' PUE is required along Pioneer Parkway, Red Mountain Drive, and Rachel Drive. A final mylar with signature blocks is required.

Required Revisions: None at this time.

#### STATE CODE CONSIDERATIONS

Utah Code, Section 10-9a-207 includes requirements for subdivision amendments. To amend a subdivision, a city must hold at least one public meeting (not public hearing). Additionally, a public meeting to consider an amendment to a subdivision requires 10 days' notice rather than 24 hours' notice. A notice must also be sent to property owners in the subdivision, with a notice in a visible location, with a sign of sufficient size and durability. City staff have determined that all State Code requirements have been met with this application.

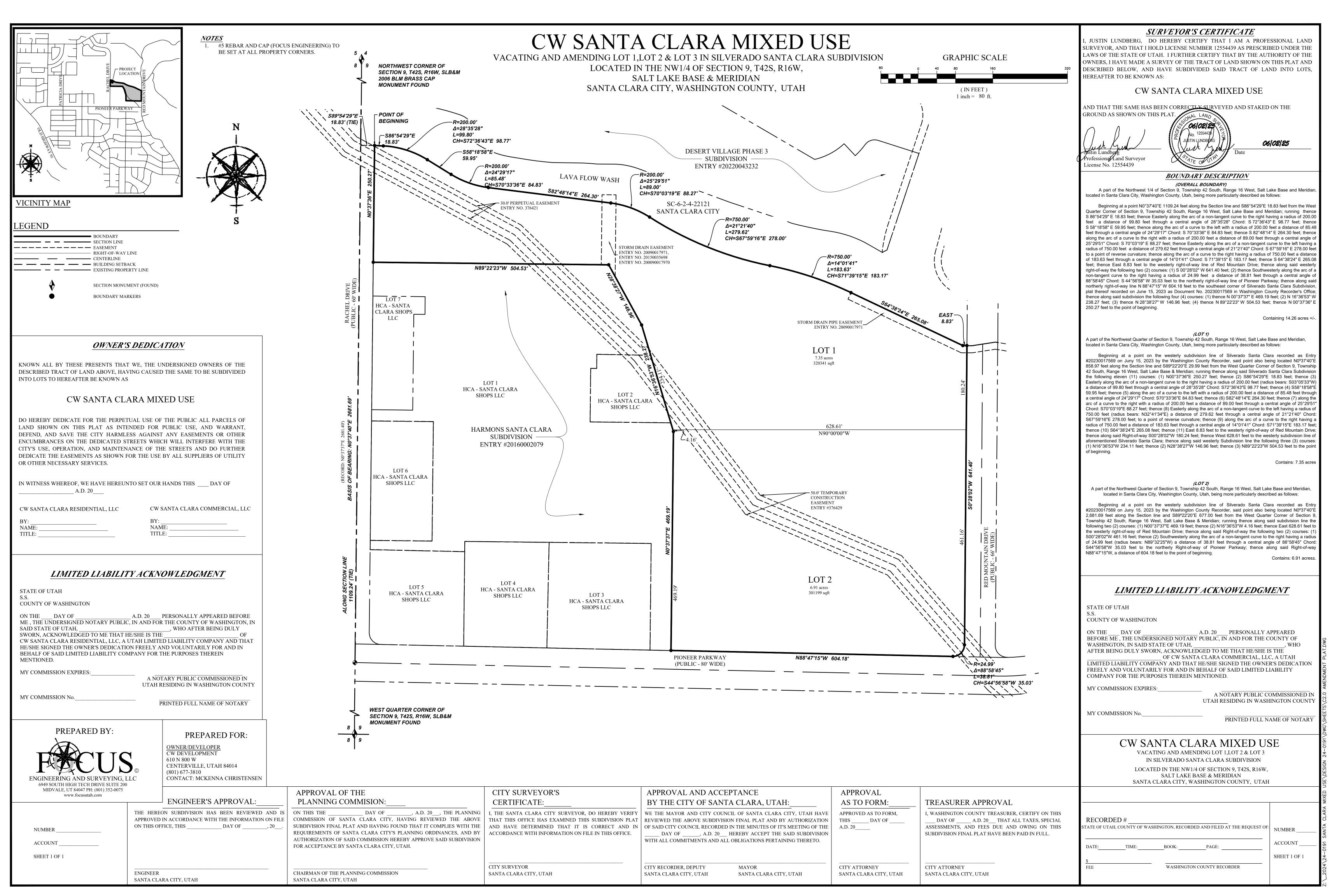
### CITY STAFF RECOMMENDATION

City staff recommends that the Planning Commission consider recommending Approval of a Plat Amendment to the City Council for the CW Santa Clara Amended Subdivision, subject to the following conditions:

- 1. That the applicant is required to comply with the recommendations from all city reviewing departments.
- 2. That the Owner's Dedication & Acknowledgement be signed prior to final plat recordation.

### **Request**: Plat Amendment

- 3. That an updated Title Report be provided prior to final plat recordation.
- 4. That the applicant be required to record the amended subdivision plat and provide an electronic copy to City staff.



### SANTA CLARA CITY PLANNING COMMISSION MEETING MINUTES 2603 Santa Clara Drive

2603 Santa Clara Drive Thursday, June 12, 2025

**Present:** Logan Blake, Chair

Shelly Harris Kristen Walton Josh Westbrook Joby Venuti David Clark

**Staff:** Jim McNulty, Planning and Economic Development Director

Debbie Andrews, Administrative Assistant

**Absent:** Curtis Whitehead

### 1. <u>Call to Order.</u>

Chair Logan Blake called the meeting to order at 5:30 PM.

### 2. **Opening Ceremony.**

### A. Pledge of Allegiance: Shelly Harris.

Chair Blake reported that there was a good turnout at the Tuesday, June 10, 2025, General Plan Open House. Copies of the parks, trails, roads, and Land Use maps were passed out, and attendees were encouraged to provide feedback. Community and Economic Development Director, Jim McNulty reported that two additional open houses would be held prior to adoption of the updated plan.

### 3. Conflicts and Disclosures.

There were no conflicts or disclosures.

### 4. Working Agenda.

### A. Public Hearing.

i. Consider a proposed Code Amendment to Chapter 17.92, Water Efficient Landscape and Conservation Standards, specifically Section 17.92.010, Applicability. This amendment would allow a development applicant to comply with the Washington County Water Conservancy District's Ultra Water Efficient Landscape Standards, which are more restrictive than the City's landscape and irrigation standards, and upon proof of compliance from the Water Conservancy District being provided to the City by the applicant, said compliance will be accepted in lieu of compliance with the City's own landscape and irrigation standards.

Planning and Economic Development Director, Jim McNulty, presented the staff report and reported that, Mayor Rosenberg; City Manager, Brock Jacobsen; and Public Works Director, Dustin Mouritsen have been attending monthly meetings with the Washington County Water Conservancy District ("WCWCD") since Santa Clara first adopted its Water Efficient Landscape and Conservation Standards in 2021.

The WCWCD recently adopted Ultra Water Efficiency Standards. Mr. McNulty reported that the WCWCD is not a supplier for the City, but adoption of the standards would allow applicants to secure Impact Fee credits by complying with the program. City staff and legal counsel determined that the additional provision could be added to Santa Clara City Code Chapter 17.92.010 without changes to the existing Code language, and Mayor Rosenberg requested that the Planning Commission review the proposed amendment and consider recommending approval to the City Council.

The following language was proposed to be added to Chapter 17.92.010: Applicability:

B. The Washington County Water Conservancy District has adopted Ultra Water Efficient Landscape Standards, which may be more restrictive than this Chapter in many ways, but which also may allow an applicant to secure more or additional Impact Fee credits from WCWCD. An applicant to the City under this chapter may voluntarily elect to comply with the WCWCD Ultra Water Efficient Landscape Standards. In the event that the applicant obtains approval or certification from WCWCD of landscape plans meeting the Ultra Water Efficient Standards, then the applicant may present documentation evidencing WCWCD's approval of landscape plans under the Ultra Water Efficient Landscape Standards and the City will accept said approval in lieu of the City's review and approval of the same plans under this chapter.

Mr. McNulty reported that per Utah State Code Section 10-9a-205, the Planning Commission must hold at least one public hearing on any proposed Land Use amendments and notice must be posted within 10 days of the hearing. City staff determined that all State requirements were met and recommended that the Commission consider forwarding a recommendation of approval to the City Council.

Mr. McNulty explained that Santa Clara has its own water system, and WCWCD water is only purchased by the City during dry periods in summer. Other cities like Ivins do not have their own system and must use WCWCD for all growth and development.

Chair Blake opened the public hearing. There were no public comments. The public hearing was closed.

Chair Blake reported that developers that build in Santa Clara pay the WCWCD Impact Fee even though the City is their water supplier, and as such they should have the option of opting into the standards. In response to his question, Mr. McNulty confirmed that municipalities that do not have their own water will be required to adopt the standards as mandatory.

Commissioner Clark stated that to his understanding, all wells on the west side of Washington County contain arsenic at varying concentrations and asked if the City or WCWCD was responsible for mixing the water. Chair Blake stated that to his knowledge, no actual mixing is required.

In response to a question from Commissioner Clark, it was confirmed that adoption of the WCWCD's Ultra Water Efficiency Standards would be optional for developers in Santa Clara. Developers that voluntarily adopt the standards would be eligible for reduced Impact Fees. Mr. McNulty stated that developments like Pioneer Pointe that have xeriscaping and a community pool would meet the requirements. If they opt into the program, they agree to maintain the standards in perpetuity.

Commissioner Venuti stated that the standards appeared to only apply to large developments with Homeowners Associations ("HOAs") and asked if there was an option for smaller developments to take advantage of the reduced fees. Chair Blake stated that they may be eligible, but homeowners would be prohibited from adding grass or pools to their lots. In response to a follow-up question, Mr. McNulty clarified that the WCWCD would enforce the standards, not the City, but agreed that an HOA would likely be required.

Mr. McNulty reported that the WCWCD was considering regulations that would limit the size of backyard pools but allow community pools up to 14,000 square feet in size. The WCWCD's sod buyback program runs with the property; future owners of properties in the program will be prohibited from reinstalling sod. They are also considering prohibiting water parks. He was unsure how many developers would opt into the Ultra Water Efficiency Standards but believed that some projects would be well suited for the program. For example, subdivisions with primarily corporate-owned or second homes often have little to no lawns.

Chair Blake stated that developments with smaller unit sizes have requested discounts due to the lowered water usage per unit, and adoption of the standards would be a way for those developers to take advantage of additional credits. Many new developments already meet the standards. Mr. McNulty reported that new homes are only allowed to have 8% lawn area up to a maximum of 2,500 square feet if they do not have access to secondary water.

Chair Blake noted that the Planning Commission's focus should be on the wording of the amendment, not the WCWCD's standards.

Commissioner Venuti approved of the amendment as long as it was voluntary, as developers of projects with community pools may be interested in taking advantage of the reduced Impact Fees.

### 5. <u>General Business.</u>

### A. Recommendation to City Council.

i. Recommendation to the City Council for a proposed Code Amendment to Chapter 17.92.010, Water Efficient Landscape and Conservation Standards Applicability.

Commissioner Westbrook moved to forward a POSITIVE recommendation to the City Council for a proposed Code Amendment to Chapter 17.92.010, Water Efficient Landscape and Conservation Standards Applicability. Commissioner Harris seconded the motion. The motion passed with the unanimous consent of the Commission.

### 6. <u>Discussion Items.</u>

### A. General Plan Update.

Mr. McNulty was unable to attend the Open House and thanked Chair Blake for his report on the event.

The June 26, 2025, Agenda would include a public hearing for the Silverado (Cole West) property. The Commission would be considering a rezoning application for the front portion of the project to Planned Development Commercial and a PDR Amendment on the rear portion. The residential portion will include both multifamily and small lot single-family housing. A public meeting would also be held to amend the Plat from three lots to two. Mr. McNulty indicated that the project presented a great opportunity to bring more retail into Santa Clara. He reported that there was a high turnout at the last public hearing on the parcel, and he anticipated multiple comments on the item. The City offices would be closed on Monday, June 16, 2025, in honor of the Juneteenth holiday, so notices of the hearing were mailed earlier that day.

### 7. **Approval of Minutes.**

### B. Request Approval of the Regular Meeting Minutes – May 22, 2025.

Chair Blake reported that on Page 5, his vote on Item II was inaccurately registered as a "no." He voted in favor of the item.

Commissioner Walton moved to approve the minutes of the May 22, 2025, Santa Clara Planning Commission Regular Meeting, as corrected. Commissioner Westbrook seconded

the motion. The motion passed unanimously with two abstentions. Commissioners Harris and Venuti abstained from the vote as they were not present at the meeting.

### 8. Adjournment

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Jim McNulty		
Planning Director		
Approved:		