

**REGULAR MEETING  
CITY OF RIALTO  
TRANSPORTATION COMMISSION  
AGENDA**

Civic Center  
Council Chambers  
150 South Palm Avenue  
Rialto, CA 92376

Wednesday  
October 5, 2016  
6:00 p.m.

*In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (909) 421-7279. Notification 48-hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting [28 CFR 35.102-35.104 ADA Title II].*

*Members of the public are given an opportunity to speak on any listed agenda items. Please notify the Public Works Department if you wish to do so. All agendas are posted in the City Hall Administration Building (150 South Palm Avenue, Rialto, CA 92376) at least 72-hours in advance of the meeting. Copies of the staff reports relating to each item on the agenda are on file in the Public Works Department. Please call (909) 421-7279 to inquire about any items described on the agenda.*

*Based upon the open meeting laws (the Brown Act), additional items may be added to the agenda and acted upon by the Transportation Commission only if it is considered to be a "subsequent need" or "emergency item" and is added by a two-thirds vote. Matters raised under Oral Communications may not be acted upon at that meeting other than as provided above.*

**CALL TO ORDER**

Time: \_\_\_\_\_

**ROLL CALL**

Present

Absent

Chairperson Dennis Barton	<input type="checkbox"/>	<input type="checkbox"/>
Vice-Chairperson Allan Kirst	<input type="checkbox"/>	<input type="checkbox"/>
Commissioner Stephanie Lewis	<input type="checkbox"/>	<input type="checkbox"/>
Commissioner Kelvin Moore	<input type="checkbox"/>	<input type="checkbox"/>
Commissioner John Plasencia	<input type="checkbox"/>	<input type="checkbox"/>
Commissioner Max Tidler	<input type="checkbox"/>	<input type="checkbox"/>
<i>Mayor – Deborah Robertson</i>	<input type="checkbox"/>	<input type="checkbox"/>

**MOMENT OF SILENCE / INVOCATION**

**PLEDGE OF ALLEGIANCE**

**APPROVAL OF MINUTES**

Regular Meeting – September 7, 2016

**ACTION**

Motion \_\_\_\_\_

Second \_\_\_\_\_

Vote \_\_\_\_\_

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**ORAL COMMUNICATIONS**

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**POLICE DEPARTMENT LIAISON REPORT**

ITEM 1

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**RIALTO UNIFIED SCHOOL DISTRICT LIAISON REPORT**

ITEM 2

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Locust Avenue Warehouse Focused TIA 2<sup>nd</sup> Review  
(Gene Klatt, P.E., Lockwood Engineering)

**ACTION**

ITEM 3  
Motion \_\_\_\_\_  
Second \_\_\_\_\_  
Vote \_\_\_\_\_

Action Item

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North Ayala Drive Gas Station TIA  
(Gene Klatt, P.E., Lockwood Engineering)

**ACTION**

ITEM 4  
Motion \_\_\_\_\_  
Second \_\_\_\_\_  
Vote \_\_\_\_\_

Action Item

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Palmetto Avenue & Renaissance Parkway TIA  
(Gene Klatt, Lockwood Engineering)

**ACTION**

ITEM 5  
Motion \_\_\_\_\_  
Second \_\_\_\_\_  
Vote \_\_\_\_\_

Action Item

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Coffee Bean & Tea Leaf Focused TIA  
(Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer)

**ACTION**

ITEM 6  
Motion \_\_\_\_\_  
Second \_\_\_\_\_  
Vote \_\_\_\_\_

Action Item

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**ENGINEER'S REPORT**

ITEM 7

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**FUTURE AGENDA ITEMS**

ITEM 8

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1. Discussion on Identifying a Plan for Improvements South of the I-10 Freeway
  2. Transportation Planning/Funding Major Improvements
  3. Cactus/I-10 Crossing
  4. Pepper Avenue Interchange Project
  5. Information on Regional Discussions
  6. Transportation Plan as it Relates to Active Transportation
  7. Metrolink Parking Lot Expansion Project
  8. Local Fees for Transportation Improvements
  9. Signal Prioritization Plan
  10. Future Improvements to Riverside Avenue, Sierra Avenue and the 1-15 Junction
  11. Riverside Avenue Bridge Widening Over the UPRR
  12. Discussion of Updating Bike Paths
  13. Alder Avenue/SR-210 – Proposed Feasibility Study
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**COMMISSIONER REPORTS**

ITEM 9

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**ADJOURNMENT**

Motion \_\_\_\_\_  
Second \_\_\_\_\_  
Vote \_\_\_\_\_  
Time \_\_\_\_\_

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**ATTACHMENTS/HANDOUTS**

1. September 7, 2016 Meeting Minutes
  2. Staff Report: Locust Avenue Warehouse TIA 2<sup>nd</sup> Review
  3. Staff Report: North Ayala Drive Gas Station TIA
  4. Staff Report: Palmetto & Renaissance TIA
  5. Staff Report: Coffee Bean & Tea Leaf TIA
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**CITY STAFF**

*Robert G. Eisenbeisz, P.E. Public Works Director/City Engineer*  
*Sergeant Cameron Nelson, Rialto Police Department*  
*Azzam Jabsheh, P.E., Traffic Engineer*  
*Michele Aguirre, Commission Clerk*

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**NOTES**

# REGULAR MEETING of the TRANSPORTATION COMMISSION

## MINUTES September 7, 2016

The regular meeting of the Transportation Commission of the City of Rialto was held in the City Council Chambers located at 150 South Palm Avenue, Rialto, California 92376, on Wednesday, September 7, 2016.

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### CALL TO ORDER

Chairperson Dennis Barton called the meeting to order at 6:01 p.m.

### ROLL CALL

The roll was called and the following Commissioners were present: Dennis Barton, Allan Kirst, Max Tidler, Stephanie Lewis, John Plasencia and Kelvin Moore. City Staff/Liaisons present: Robert Eisenbeisz, Public Works Director/City Engineer, Greg Lantz, Development Services Economic Development Manager, Azzam Jabsheh, Traffic Engineer, Scott Gaspar, Rialto PD Angela Perry, Executive Assistant to the City Administrator and Michele Aguirre, Commission Clerk.

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### APPROVAL OF MINUTES

- ◆ The minutes from the July 6th meeting were reviewed by the Commission and approved as written.
- ◆ Commissioner Tidler moved to approve the minutes from the July 6th meeting as written.
- ◆ Commissioner Kirst seconded the motion.
- ◆ The motion was carried to approve the minutes of the July 6, 2016 meeting as written.

### APPROVAL OF MINUTES

- ◆ The minutes from the August 3rd meeting were reviewed by the Commission and approved as written.
- ◆ Commissioner Tidler moved to approve the minutes from the August 3rd meeting as written.
- ◆ Commissioner Kirst seconded the motion.
- ◆ The motion was carried to approve the minutes of the August 3, 2016 meeting as written.

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### ORAL COMMUNICATIONS

- ◆ None

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### POLICE DEPARTMENT LIAISON REPORT

- ◆ Officer Scott Gaspar reported on the following:
  - Department focusing on traffic related issues.
  - 2015 had 10 fatal collisions
  - 9/7/16 had school sweeps at all schools which resulted in 105 contacts, 68 citations issued and 40 education stops.
  - Office of Traffic Safety (OTS) grant
    - Received \$200,000 in funding.

- Performing schools sweeps and warrant enforcement with funding.
- Increased staff by 5 new officers.

Questions & Comments

- ◆ Officer Gaspar answered questions and responded to comments regarding:
  - The new crosswalk at Myers Elementary.
  - Safety education at Elementary and Middle School students.
  - If the OTS Grant funding would add another Traffic Officer position.
  - Commercial Enforcement activities.

Suggestion, Requests and Recommendations

- ◆ Chairperson Barton suggested enforcement afterschool for the J-Walkers across Lilac Avenue.
- ◆ Chairperson Barton reported that commercial trucks are still parking on Easton Street between Ayala Drive and Cactus Avenue.

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RUSD LIAISON REPORT

- ◆ No report.

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REGULAR ITEMS

**SANBAG Metrolink Accessibility Project Presentation**

- ◆ Robert Eisenbeisz provided a brief overview of the project and what has occurred up to this point.
- ◆ Brian Smith of SANBAG provided a brief history of the project. Smith introduced Min Zhou of Katz Okitsu & Associates (KOA) Corporation.
- ◆ Zhou discussed the project improvements.
- ◆ Alan Yasuda of KOA reviewed the bike lane and parking concept design.

Questions & Comments

- ◆ Zhou, Yasuda, Smith & Eisenbeisz answered questions and responded to comments regarding:
  - Why the project is going to Merrill Avenue.
  - Comment on the businesses that would be affected between Cactus & Willow Avenues
  - If the angled parking would be a back-in type.
    - A discussion ensued regarding angled parking.
  - If there was a plan for the city bus to meet up at the Metrolink Station.
  - Clarification on the amount of parking spaced that would be lost in the area.
  - How many empty spaces exist on a daily basis at the Metrolink Station.
  - If there are not any empty spaced at the Metrolink Station, why are spaces being removed.
  - How many bike spaces would be created by the project.
  - Who would be promoting biking and how will the bike paths be promoted.

- If any type of motorized bicycles would be able to park in those spaces.
- Who would be responsible for monitoring this.
- If the parking would accommodate oversized vehicles.
  - A discussion ensued regarding the additional plan for angled parking and bike lanes.

Suggestions, Requests & Recommendations

- ◆ Chairperson Barton recommended that there be public outreach regarding the loss of parking in the area.

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**Proposed Stop Sign at Terra Vista Drive and Live Oak Avenue**

- ◆ Azzam Jabshah reviewed the staff report and recommendations on the item.

Observations

- ◆ Chairperson Barton advised that the desirable sight distance was 440 feet and the minimum stopping sight distance was 305 feet. He stated that the sight distance use of 250 feet meets the minimum speed limit of 35MPH which was the posted speed limit. He asked if this was the criteria that was going to be used, was the speed limit was going to be increased. Eisenbeisz advised that the question was valid as there would be a time when the speed survey would need to be updated. He stated that to be able to enforce this location, the speed survey would need to be abided by.

Action

- ◆ Commissioner Kirst moved to accept staff's recommendations to install All-Way Stop controls at the intersection of Terra Vista Drive and Live Oak Avenue.
- ◆ Commissioner Plasencia seconded the motion.
- ◆ All voted in favor of accepting staff's recommendations to install All-Way Stop controls at the intersection of Terra Vista Drive and Live Oak Avenue.

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**Support for League of California Cities Adoption of a Resolution Supporting Vision Zero**

- ◆ Gene Klatt reviewed the staff report and recommendation for this item.

Questions & Comments

- ◆ Klatt answered questions and responded to comments with regard to:
  - How many cities surrounding Rialto have subscribed to the request.

Concerns

- ◆ Commissioner Kirst stated that he was concerned with the liability issues which causes him to not be in favor of the resolution at this time.
- ◆ Commissioner Lewis expressed concern with the issue of all the changes from recent TIA's which would be in conflict with the Vision Zero resolution.
- ◆ Commissioner Plasencia stated that he agreed with Commissioner Lewis and asked if the City could wait on approving this.

- ◆ Chairperson Barton expressed his concern on the information from the policy that implies that current designs do not address safety or follow design guidelines. He stated that standards would need to be developed either in California or nationwide. He stated that there was too much liability and he could not support the resolution.
- ◆ Angela Perry asked for clarification that the recommendation from the Transportation Commission was to have City Council have their delegates vote no at the conference. She stated that she wanted the verbiage correctly stated for the minutes.

#### Action

- ◆ Commissioner Moore moved that the Transportation Commission recommends that the City's delegate to the League of California Cities vote no on Vision Zero.
- ◆ Commissioner Tidler seconded the motion.
- ◆ All voted in favor of the Transportation Commission recommending that the City's delegate to the League of California Cities vote no on Vision Zero.

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#### **Locust Avenue Warehouse – Focused TIA**

- ◆ Gene Klatt reviewed that staff report and recommendations for this item.

#### Questions & Comments

- ◆ Klatt answered questions and responded to comments with regard to:
  - The claim that there would be 61 vehicles but only 31 would be used.
  - That there would be only 30 parking spaces for employees but there was 61 trucks and why that ratio existed.
  - What the hours of operation would be, either 5 days or 6.
  - If there would be tandem trailers.

#### Concerns

- ◆ Chairperson Barton stated that he would feel more comfortable if there were answers to the questions asked. He stated that a concern of the Commission has always been that there was adequate parking for staff.
- ◆ Commissioner Tidler stated that he had concerns with one entrance in, one exit out, and the width of the drive way. Klatt provided an explanation for the reason for the drive way width.
- ◆ Commissioner Tidler stated that he did not feel that the report was complete as there were still a lot of unknowns.
- ◆ Commissioner Tidler stated that he had concerns with the impacts to the area as there still were no upgrades to the on/off ramps.

#### Suggestions, Requests and Recommendations

- ◆ Chairperson Barton requested that answers be given to the question asked, in the real world, before moving forward with the project. Klatt advised that he could ask the consultant and developers.

Action

- ◆ Commissioner Kirst moved to not accept the TIA focused at this point and that the questions raised by the Commission be brought up to the consultant or owner for answers.
- ◆ Commissioner Moore seconded the motion.
- ◆ All voted in favor of not accepting the TIA focused at this point and that the questions raised by the Commission be brought up to the consultant or owner for answers.

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**Nelson Adams NACO - TIA**

- ◆ Gene Klatt reviewed the staff report and recommendations for this item.

Questions & Comments

- ◆ Klatt answered questions and responded to comments with regard to:
  - If Merrill Avenue would be used as a travel route.
    - A discussion ensued regarding the current truck routes and the need to revisit them.

Suggestions, Requests and Recommendations

- ◆ Chairperson Barton suggested to encourage the developer to avoid morning and afternoon school hours.

Action

- ◆ Commissioner Lewis moved to accept the TIA with the suggestion to encourage the developer to avoid morning and afternoon school hours.
- ◆ Commissioner Kirst seconded the motion.
- ◆ All voted in favor of accepting the TIA with the suggestion to encourage the developer to avoid morning and afternoon school hours.

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**Prologis Park SR-210 Building 7 - TIA**

- ◆ Gene Klatt reviewed the staff report and recommendations on this item.

Questions & Comments

- ◆ Klatt and Eisenbeisz answered questions and responded to comments with regard to:
  - If there would typically be an access gate to the property.
  - The landscaping along Locust Avenue.
  - If truck parking would be visible from Locust Avenue.
  - The type of wall used on Locust Avenue.
  - With the increase in development projects on Locust Avenue, if there was a plan to address the improvements needed on Locust Avenue.
  - The egress and ingress on the north side of the property.
  - If there are conditions to prevent on street truck parking.
    - A discussion ensued regarding on street parking and other parking issues. Chairperson Barton advised that the parking issues needs to be revisited, especially when issues that exists do not match what was provided in the TIA.

### Action

- ◆ Commissioner Kirst moved to accept the TIA with the condition that on street parking or stopping be address on Locust Avenue between Bohnert and Lowell Avenues.
- ◆ Commissioner Moore seconded the motion.
- ◆ All voted in favor of accepting the TIA with the condition that on street parking or stopping be address on Locust Avenue between Bohnert and Lowell Avenues.

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### ENGINEER'S REPORT

- ◆ Robert Eisenbeisz reported on and answered questions on the following items:
  - Number of Jobs Created at Niagara & Medline
  - Development Impact Fees
  - Alder Avenue/SR-210 Feasibility Study
  - Working with PD and Development Services on the truck routes

### Requests

- ◆ Chairperson Barton requested to have an update on the Alder Avenue/ SR-210 Feasibility Study presented at the November meeting.

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### FUTURE AGENDA ITEMS

- ◆ No changes, additions or deletions.

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### COMMISSIONER REPORTS

- ◆ Commissioner Kirst reported that the transition stripping from Easton Street to Highland Avenue needs to be refreshed. Eisenbeisz advised that Public Works would be completing that task.
- ◆ Commissioner Tidler requested to close the meeting in honor of longtime Rialto resident Bill Clinton, who lost his battle with Cancer.
- ◆ Commissioner Lewis – No Report
- ◆ Commissioner Plasencia – No Report
- ◆ Commissioner Moore – No Report
- ◆ Chairperson Barton – No Report

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### ADJOURNMENT

- ◆ Commissioner Tidler made a motion to adjourn the meeting in honor of longtime resident Bill Clinton who passed away on September 6, 2016.
- ◆ Commissioner Plasencia seconded the motion.
- ◆ The motion was carried and the meeting adjourned at 8:01 p.m.

# CITY OF RIALTO

## TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of October 5, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Focused Traffic Impact Analysis – Locust at Lowell, Trucking and Storage Facility.
DATE:	September 13, 2016

### **BACKGROUND:**

This project was first considered at the September 7, 2016 meeting. The Transportation Commission raised questions on the hours of operation and on the employee parking (number of spaces). Action on this item was continued to the next meeting pending additional information from the project applicant.

The project is located on the east side of Locust Avenue just south of Lowell Street as shown on **page 1.2 of the TIA in Figure 1** which is included as **Attachment 1**.

The Project proposes construction of a trucking company facility that transports construction materials. The site will be the location for storage of approximately 61 material trucks used to haul building materials along with a truck maintenance facility and parking for 30 automobiles (truck drivers) and support staff. The site plan is shown on **page 1.3 of the TIA as Figure 2** which is included as **Attachment 2**. The driveway is 40 feet wide and is on the northern end of the property. The entrance is proposed to be gated with the gates approximately 60 feet back from the street. The only passenger vehicle parking is located behind the gate and the developer has indicated the gates remain open during business hours.

The trip impacts were estimated using 50% of the truck traffic outbound in the AM and 50% inbound in the PM peak hours and 90% of passenger vehicles inbound in the AM peak and 90% outbound in the PM peak hour. The trip impacts using the assumed rates are shown on **page 3.1 of the TIA in Table 2**, which is included as **Attachment 3**, and the project generates 450 daily PCE trips with 129 AM peak hour trips and 126 PM peak hour trips.

The attached memo explains the business operations and timing. It appears to be Monday thru Saturday between 2:00 AM and 5:00 PM on weekdays and 2:00 AM to 3:00 PM on Saturday. Drivers park where the truck was parked. Maintenance facilities closes at 3:00 PM. Typically, there are six office employees.

The traffic and intersection counts are provided in Appendix B and were collected in March 2016. Based on the original scoping agreement, this project did not meet the 50-trip threshold at intersections with the distribution shown in the report. However, a focused study was recommended. The focused study would look at the intersections both the north at Locust Avenue/Riverside Avenue (signalized) and south at Locust Avenue/Casmalia Street (signalized)

to see if there would be impacts from this development in combination with background growth and other known projects in the area (cumulative growth). The study also recognized that other TIA's in the immediate vicinity had identified the need for a traffic signal at Locust Avenue/Bohnert Avenue and included a fair share contribution to this signal as well. The south intersection of Locust Avenue/Casmalia Street shows needs for dual left turn lanes from eastbound Casmalia Street to northbound Locust Avenue, dedicated southbound right turn lane on Locust Avenue at Casmalia Street and some lengthening of southbound left turn lane. At Locust Avenue/Riverside Avenue, the northwest bound Riverside Avenue to southbound Locust Avenue left turn lane also requires minor lengthening. This is shown on **page 3.13 in Table 8 Queue Summary** which is included as **Attachment 4. Page 3.8, Table 6**, which is included as **Attachment 5**, looks at the intersections and shows Locust Avenue/Casmalia Street at LOS C in the AM peak hour and LOS D in the PM peak hour, the project driveway at LOS C, with Locust Avenue/Riverside Avenue at LOS B under cumulative conditions with the project. The LOS remains unchanged when the project is added to cumulative conditions.

The project will be required to complete street improvements along Locust Avenue adjacent to the site.

### **ANALYSIS/DISCUSSION:**

The project alone did generate sufficient peak hour trips to require a full TIA but assumptions on peak hour were at best a guess. After review, it was determined that a focused study was adequate to analyze the impacts of the project and growth in the area at intersections north and south of the development. Beyond the north end at Riverside Avenue and the south end at Casmalia Street, trips dropped to well below the threshold. The focused study did not conduct signal warrants analysis because signals exist at intersections north (Riverside Avenue/Locust Avenue) and south (Locust Avenue/Casmalia Street) of the site. The focused study also accepted the other local TIA's analysis of signal warrants at Locust Avenue/Bohnert Avenue and is paying a fair share portion of the required signal.

The focused study indicated all intersection would operate at LOS D or better in all conditions and that payment of fair share fees for as shown on **page 3.15 Table 9, which is included as Attachment 6**, in an amount of \$42,430 along with normal Development Impact Fees for traffic would suffice for this project. The fair share is \$32,500 for the signal based on 13% contribution and \$9,930 for dedicated left and right turn lanes. Percentage for fair share was based on peak hour volumes rather than ADT.

### ***Conclusion***

The scoping agreement was completed February 1, 2016 and the final focused TIA submitted August 3, 2016. The project generates traffic under the threshold for a full TIA and the focused TIA requested has analyzed two intersections north and south of the project as well as accepting a fair share contribution to a third intersection at Locust Avenue/Bohnert Avenue. The conclusions of the TIA are that the project will not create any LOS below the level of D at any intersection or decrease the LOS that will exist with cumulative development.

Payment of fair share amounts along with normal traffic related DIF fees are deemed adequate for this project and no off-site improvements are needed beyond required street improvements as a part of development.

**RECOMMENDATIONS:**

Staff requests that the Transportation Commission:

- Accept the Focused Traffic Impact Analysis and its conclusions as complete and that the fair share fees be collected along with other DIF fees as detailed in the TIA.
- Makes recommendations to the City Council that the project be approved.

Attachments:

- 1) Response to Transportation Commission Questions
- 2) Project Location Map
- 3) Site Plan
- 4) Trip Generation & PCE
- 5) Queue Summary
- 6) LOS & Delay Summary with Project
- 7) Fair Share Percentage

**From:** [Guillermo Calvillo](#)  
**To:** [Gene Klatt](#); "[Zerfass, Daryl](#)"  
**Cc:** [Daniel Casey](#)  
**Subject:** RE: Locust Ave. Warehouse Project south of Lowell Ave. in Rialto  
**Date:** Tuesday, September 13, 2016 9:27:52 AM  
**Attachments:** [image003.png](#)  
**Importance:** High

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Dear Gene,

Please refer to the answers in green below. Also, there will have a representative attending the next meeting to ensure we provide answers on the spot.

Daniel, is it possible for us to receive official notification of meeting?

Best regards,

Guillermo Calvillo

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**CALVILLO CONSULTING SERVICES**

2421 Foothill Boulevard /No. 3E La Verne, California 91750

Phone: 951 . 990 . 3705 Fax: 909 . 596 . 3129

[CalvilloConsultingServices@outlook.com](mailto:CalvilloConsultingServices@outlook.com)

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**From:** Gene Klatt [mailto:gklatt@rialto.ca.gov]  
**Sent:** Monday, September 12, 2016 9:41 AM  
**To:** Zerfass, Daryl (Daryl.Zerfass@stantec.com) <Daryl.Zerfass@stantec.com>; 'Guillermo Calvillo' <CalvilloConsultingServices@outlook.com>  
**Subject:** Locust Ave. Warehouse Project south of Lowell Ave. in Rialto

Gentlemen,

Your item was considered by the Transportation Commission at their September 7, 2016 meeting. The Commission had questions and unfortunately, without a representative of the project there, and without answers, they continued the item to the next meeting.

Questions raised by the Transportation Commission were:

1. Please explain how 61 truck only require 30 parking spaces for drivers. That is, the report indicates there are spaces for 61 trucks. The report also states that 50% come and go in the peak hours but the Commission was concerned that with a total of 61 trucks, where did all of the drivers park along with whatever support staff might be required for the office/repair facility (basically 61 drivers and perhaps 6 office/shop staff needing something like 67 spaces). Their concern is employees parking on the street in front of the business and/or adjacent businesses when the intent is to have all employees park on site.
2. Would there be a time when all 61 trucks were being used?

3. What are the hours of operation for this site. Opening and closing times as well as days per week that operations are planned or could take place.

*[Guillermo]* The operations schedule M-F, Saturdays 2:00am – 10 am, office opens from 8 - 12:00

2:00 am: Drivers arrive to the facility, they are trained to park their own automobile in the vacated spot once they move their truck; that way, no extra parking space is required.

3:00 am: All trucks have exited the facility by then, only units remaining are the ones in need of repair/ maintenance.

8:00 am: Office opens for a total of six employees.

2:00 pm: Trucks begin to return to yard as drivers end their shifts.

3:00 pm: Most trucks have been parked and drivers leave for the day.

5:00 pm: Office closes.

Maintenance shop is open from 6:00 am to 3:00 pm for scheduled maintenance and repairs.

The next Commission meeting is October 5, 2016 and as with all Commission meetings is held in the City Council Chambers beginning at 6:00 PM. If you could provide written response to the above and perhaps have a representative attend the next meeting to answer any additional questions they may have we can perhaps obtain approval at the next meeting.

If you have questions, please feel free to contact me by e-mail or at 909 421-4942.

Cordially,

*Gene R. Klatt*

Consultant Engineer - Contract Staff

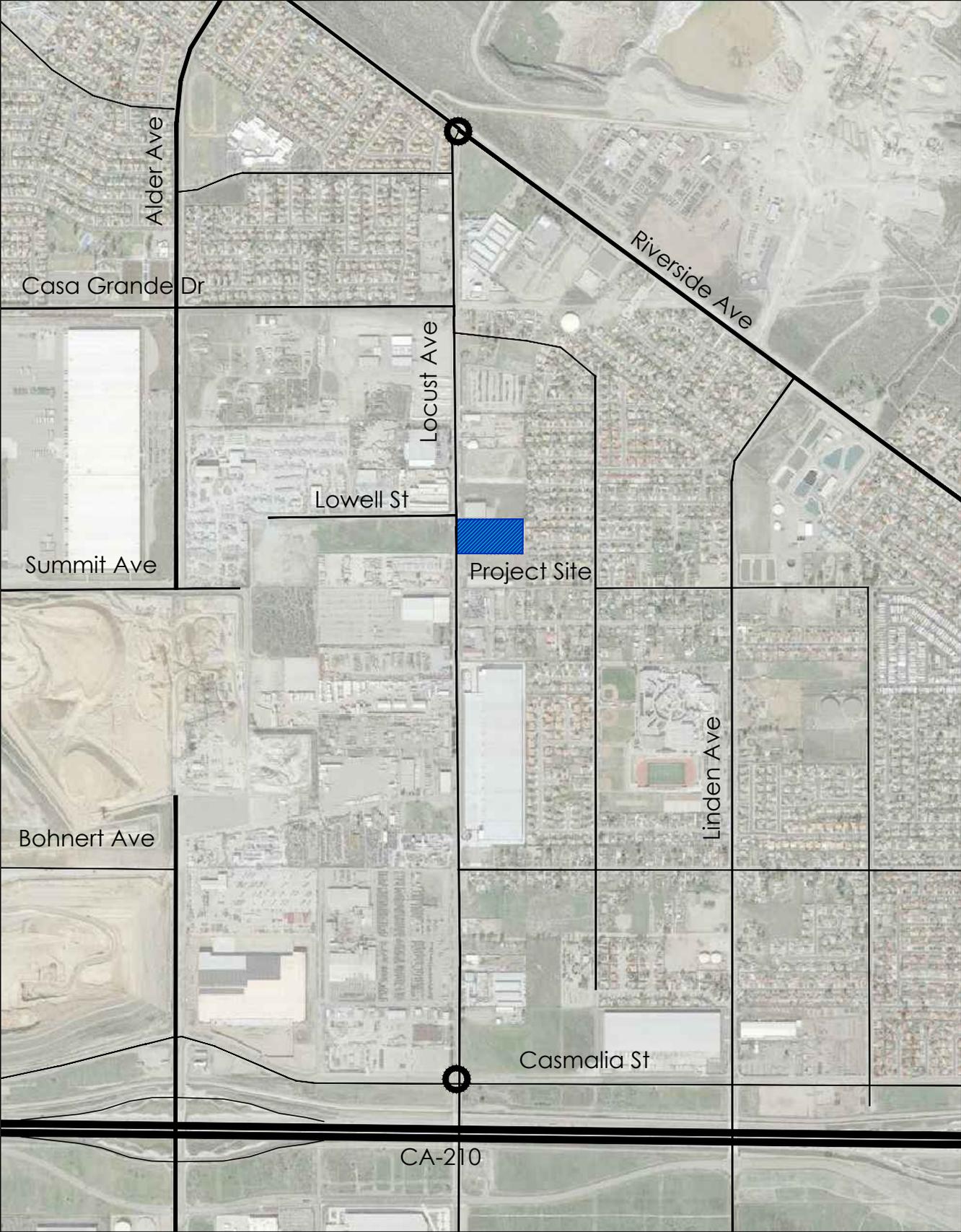
City of Rialto

[gklatt@rialtoca.gov](mailto:gklatt@rialtoca.gov)

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**Figure 1**  
Project Location Map



**Traffic Impact Analysis for Locust Ave Warehouse Project**

Projected Future Traffic  
July 2016

**3.0 PROJECTED FUTURE TRAFFIC**

**3.1 PROJECT TRAFFIC AND PROJECT PHASING**

**3.1.1 Trip Generation**

This traffic study has been prepared utilizing methodology outlined in the City of Rialto's traffic impact study guidelines. Trip generation estimates are used as described in the approved scoping agreement for the proposed project, which were prepared using standardized Institute of Transportation Engineers (ITE) trip generation rates and with truck volumes adjusted to passenger car equivalents (PCE). The approved scoping agreement can be found in the Appendix A. Table 2 shows the Trip Generation and PCE calculations.

**Table 2 Trip Generation and PCE Calculations**

<b>Trip Generation – Total Vehicles</b>			
	<b>In</b>	<b>Out</b>	<b>Total</b>
AM Trips	30*	31**	61
PM Trips	31**	27*	58
* ITE Trip Rate utilized for AM inbound and PM outbound - General Light Industrial (110) ** 50% of total trucks assumed to leave site in AM peak hour, and arrive at site in PM peak hour.			
<b>Trip Generation: Passenger Cars Only</b>			
	<b>In</b>	<b>Out</b>	<b>Total</b>
AM Trips	27*	0	27
PM Trips	0	24*	24
* Passenger cars are assumed to make 90% of AM inbound and PM outbound trips.			
<b>Trip Generation: Trucks Only</b>			
	<b>In</b>	<b>Out</b>	<b>Total</b>
AM Trips	3**	31*	34
PM Trips	31*	3**	34
* AM outbound trips and PM inbound trips are assumed to be truck traffic only. ** Trucks are assumed to make 10% of AM inbound and PM outbound trips.			
<b>Trip Generation: Trucks with PCE factor (4 - axle trucks = 3 PCE)</b>			
	<b>In</b>	<b>Out</b>	<b>Total</b>
AM Trips	9	93	102
PM Trips	93	9	102
<b>Trip Generation: TOTAL PCE</b>			
	<b>In</b>	<b>Out</b>	<b>Total</b>
AM Trips	36	93	129
PM Trips	93	33	126



**Traffic Impact Analysis for Locust Ave Warehouse Project**

Projected Future Traffic  
July 2016

**3.4 QUEUE LENGTH ANALYSIS**

The two signalized study intersections were also evaluated using micro-simulation analysis (SimTraffic) to evaluate the peak hour movements and queue lengths to determine if the left-turn pockets and right-turn pockets can accommodate the addition of cumulative and project generated traffic.

The queue summary of the turn movements for the study intersections are shown in Table 7 for existing conditions and in Table 8 for cumulative conditions.

**Table 7 Queue Summary – Existing Conditions without and with Project**

Location	Turn Movement	Storage Bay Dist (ft)	95 <sup>th</sup> Percentile Queue (ft)			
			Existing Conditions		Existing plus Project Conditions	
			AM	PM	AM	PM
Locust Ave and Casmalia St	EB Left	280*	123	171	128	183
	WB Left	210	15	16	14	10
	NB Left	250	26	39	22	33
	SB Left	175	49	89	78	100
Locust Ave and Riverside Ave	NB Left	200	13	42	50	47
	NW Left	125	66	84	88	102

\*Note: The existing eastbound left-turn pocket on Casmalia Street is not striped for the full length of the pocket. The existing centerline striping would allow for a 280-foot pocket.

**Table 8 Queue Summary – Cumulative Conditions without and with Project**

Location	Turn Movement	Storage Bay Dist (ft)	95 <sup>th</sup> Percentile Queue (ft)			
			Cumulative without Project		Cumulative with Project	
			AM	PM	AM	PM
Locust Ave and Casmalia St	EB Left	280*	<b>282</b>	<b>309</b>	<b>292</b>	<b>344</b>
	WB Left	210	115	77	140	68
	NB Left	250	26	48	27	49
	SB Left	175	84	<b>192</b>	123	<b>223</b>
Locust Ave and Riverside Ave	NB Left	200	106	110	103	110
	NW Left	125	112	109	103	<b>133</b>

\*Note: The existing eastbound left-turn pocket on Casmalia Street is not striped for the full length of the pocket. The existing centerline striping would allow for a 280-foot pocket.

**Traffic Impact Analysis for Locust Ave Warehouse Project**

Projected Future Traffic  
July 2016

The estimated cost provided for adding a second eastbound left-turn lane for Casmalia Street at Locust Avenue is \$72,898, the addition of exclusive southbound right-turn lane can be done by restriping and is estimated to be \$3,500. The cost of the Locust Avenue and Bohnert Street traffic signal is estimated at \$250,000.

Based on the fair share percentages shown in Table 9, approximately 13 percent of the estimated cost is to be contributed by the project to the improvements at Locust Avenue/Casmalia Street intersection improvements and Locust Avenue/Bohnert Street traffic signal.

**Table 9 Fair Share Percentage**

	Locust & Bohnert		Locust & Casmalia	
	AM	PM	AM	PM
Project Trips	78	76	78	76
Total Volume Increase	535	552	535	552
Fair share (%)	13%	12%	13%	12%
Improvement Cost (\$)	\$250,000		\$76,398	
Fair share (\$)	\$32,500		\$9,930	

In total, the project's fair share contribution for the improvements identified at the two locations listed above is approximately \$42,430.

**Traffic Impact Analysis for Locust Ave Warehouse Project**

Projected Future Traffic  
July 2016

Figure 9 shows a map of the approximate locations of the related projects. Figure 10 illustrates the project trips from the cumulative projects for the AM and PM peak hours.

Figure 11 shows the AM and PM peak hour volumes for cumulative conditions without the proposed project. The LOS and delay for the two signalized study intersections are summarized in Table 5, which shows that the intersections would operate at an acceptable LOS D or better, with a maximum delay of 42.0 seconds per vehicle, under cumulative conditions without project.

**Table 5 LOS & Delay Summary – Cumulative Conditions without Project**

Location	AM		PM	
	LOS	Delay (sec)	LOS	Delay (sec)
<b>Signalized</b>				
Locust Ave and Casmalia St	C	33.3	D	42.0
Locust Ave and Riverside Ave	B	14.9	B	15.8

Figure 12 shows the AM and PM peak hour volumes for cumulative conditions with addition of project generated traffic. The LOS and delay estimates for the two signalized intersections and for the project driveway are summarized in Table 6, which shows that the intersections would operate at an acceptable LOS D or better. The project's incremental change to the average delay is less than five seconds per vehicle, which is not considered a significant impact at these levels of service based on the City's LOS Standards.

**Table 6 LOS & Delay Summary – Cumulative Conditions with Project**

Location	Cumulative without Project Conditions				Cumulative with Project Conditions			
	AM		PM		AM		PM	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
<b>Signalized</b>								
Locust Ave and Casmalia St	C	33.3	D	42.0	C	34.9	D	46.4
Locust Ave and Riverside Ave	B	14.9	B	15.8	B	15.2	B	15.6
<b>Unsignalized</b>								
Locust Ave and Project Driveway	-	-	-	-	C	16.8	C	17.6

# CITY OF RIALTO

## TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of October 5, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Traffic Impact Analysis – East Side of Ayala Drive north of Base Line Road.
DATE:	September 6, 2016

### **BACKGROUND:**

The project is located on the east side of Ayala Drive north of Base Line Road as shown on **page 7 of the TIA in Figure 1** which is included as **Attachment 1**.

This project is the construction of a 16 fueling position gas station with convenience market and car wash facilities. The project is on the east side of Ayala Drive just north of the 7-Eleven fuel station and convenience market located at the northeast corner of Ayala Drive and Base Line Road. The site plan is shown on **page 8 of the TIA as Figure 2** which is included as **Attachment 2**. The driveways shown are each 40-foot wide and will both be right in/right out. Although not shown on the site plan, it appears the driveways are approximately 150 feet centerline to centerline. This does not comply with Standard Drawing S-107 (the standard would require driveways separated by 250 feet). The southerly driveway is approximately 60 feet centerline to centerline from an existing driveway at the 7-Eleven facility. As originally submitted the site was shown to be much larger and extending farther north. It appears that two driveways are required to all fuel tankers to access the site, as turning on site may not be possible. It is unknown what, if any, development will occur north of the site between the north driveway and Fitzgerald Avenue or where additional driveways might be located.

The trip impacts were estimated using standard ITE rates. The trip impacts using standard gas station with convenience market and car wash rates are shown on **page 22 of the TIA in Table 3**, which is included as **Attachment 3**, and the project generates 2,445 daily trips with 190 AM peak hour trips and 222 PM peak hour trips. The analysis did take credit for pass-by trips and the calculated net trip increase is 1,834 daily trips with 143/167 in the AM/PM peak hours.

The traffic counts have a variety of dates and much of the data was lifted from the Renaissance Specific Plan Amendment data and the LSA report done for the Renaissance Specific Plan Amendment. Dates include counts from 9-24-2013, 4-1-2014 peak hour, 1-21-2015 Classification, 3-17-2015 turning movement and 10-9-2015 LSA data. This project began in June of 2015 but some of the counts were outdated even when the project began. The Renaissance Specific Plan Amendment made some adjustments to the data as they had to account for background growth and it appears some of this adjusted data is contained in the current TIA.

The project will be required to complete street improvements along Ayala Drive and is aware a raised median will be required.

**ANALYSIS/DISCUSSION:**

The project TIA considered five intersections plus the two proposed driveways along Ayala Drive. Beginning at the north at Casmalia, the freeway ramps (east and westbound), Renaissance Parkway, Fitzgerald Avenue, the two proposed driveways and Base Line Road intersections along Ayala Drive are evaluated. The TIA also considered roadway segments along Ayala Drive from Base Line Road to Fitzgerald Avenue and Ayala Drive between Fitzgerald Avenue and Renaissance Parkway.

This analysis is based on standard rates for fuel stations with convenience market and car wash. The TIA analyzed existing and forecast peak hour intersection operations to determine potential impacts on peak hour level of service. It used 12-36 month old traffic counts (September 2013) and lifted projected traffic numbers from the Renaissance Specific Plan Amendment to be consistent with other recent TIA's and traffic projections. Widening of Ayala Drive from Base Line Road to Renaissance Parkway has been awarded and construction should begin in the near future with completion prior to project opening. This project will be responsible for improvements adjacent to the site.

**Table 10, page 40** of the TIA, which is included as **Attachment 4**, provides a summary of cost estimates, descriptions of the improvements and existing funding sources for the impacted locations.

The TIA Mitigation Measures for intersection and roadway segment improvements are shown **on page 55** of the TIA

The report proposes to pay a fair share of improvements as listed below and as shown on **page 55 and in Table 10 on page 40** of the TIA.

- Pay fair share of improvements at Ayala Drive and Renaissance Parkway (intersections #3) with construction of additional eastbound left turn lane at 7.2% or \$24,177
- Pay fair share of improvements at Ayala Drive at Fitzgerald Avenue (intersection #4) with installation of new signal and restripe northbound right turn lane to shared through/right at 20.1% or \$30,246
- Pay fair share of improvements at Base Line Road at Ayala Drive (intersection #7) with additional northbound left turn lane, restripe northbound right turn to shared through/right turn and construct additional eastbound left turn lane 6.3% or \$9,142
- Pay fair share of unfunded portion of Ayala Drive widening at 14.1% or \$28,916

The total fair share payments for intersections and segments is **\$92,481**

These fair share estimates are based on the amount of traffic this project adds to the total projected 2035 traffic.

There are no improvements listed for Ayala Drive/SR-210. The City is still considering options and funding for studies and final mitigations at this location. Fair share costs are consistent with other recently approved projects and mitigations except at the freeway interchange.

The TIA indicated all streets and intersection would operate at LOS C or better in all conditions and that payment of normal Development Impact Fees for traffic along with fair share amounts would address the impacts for this project.

### **Conclusion**

The scoping agreement was completed July 17, 2015 and the first TIA submitted January 27, 2016. A revised TIA (#2) was submitted April 4, 2016, another revised TIA (#3) submitted July 11, 2016, a fourth revised TIA submitted August 8, 2016 (#4) with a final TIA (#5) submitted August 22, 2016. The project generates substantial traffic and analyzed seven intersections along Ayala Drive. to determine the impacts. The conclusions of the TIA are that the project will not create any LOS below the level of D at any of the studied intersection or along Ayala Drive if the recommended improvements are made. Project layout seems to require two driveways and separation as required by Standard S-107 does not appear possible. The project does rely on U-turns at the intersection of Ayala Drive/Fitzgerald Avenue for the directional traffic movements.

Payment of normal traffic related DIF fees along with the noted fair share payments are deemed adequate for this project. Off-site improvements needed are partially included in the improvement plans for Ayala Drive from Base Line Road to Renaissance Parkway and fair share fees are contributed based on the percentage of traffic this project has on overall projected traffic along Ayala Drive.

### **RECOMMENDATIONS:**

Staff requests that the Transportation Commission:

- Accept the Traffic Impact Analysis and its conclusions as complete.
- Make recommendations to the City Council that the project be approved.

Attachments:

- 1) Project Location
- 2) Site Plan
- 3) Project Trip Generations
- 4) Project Fair Share Traffic Contributions

Figure 1  
Project Location Map

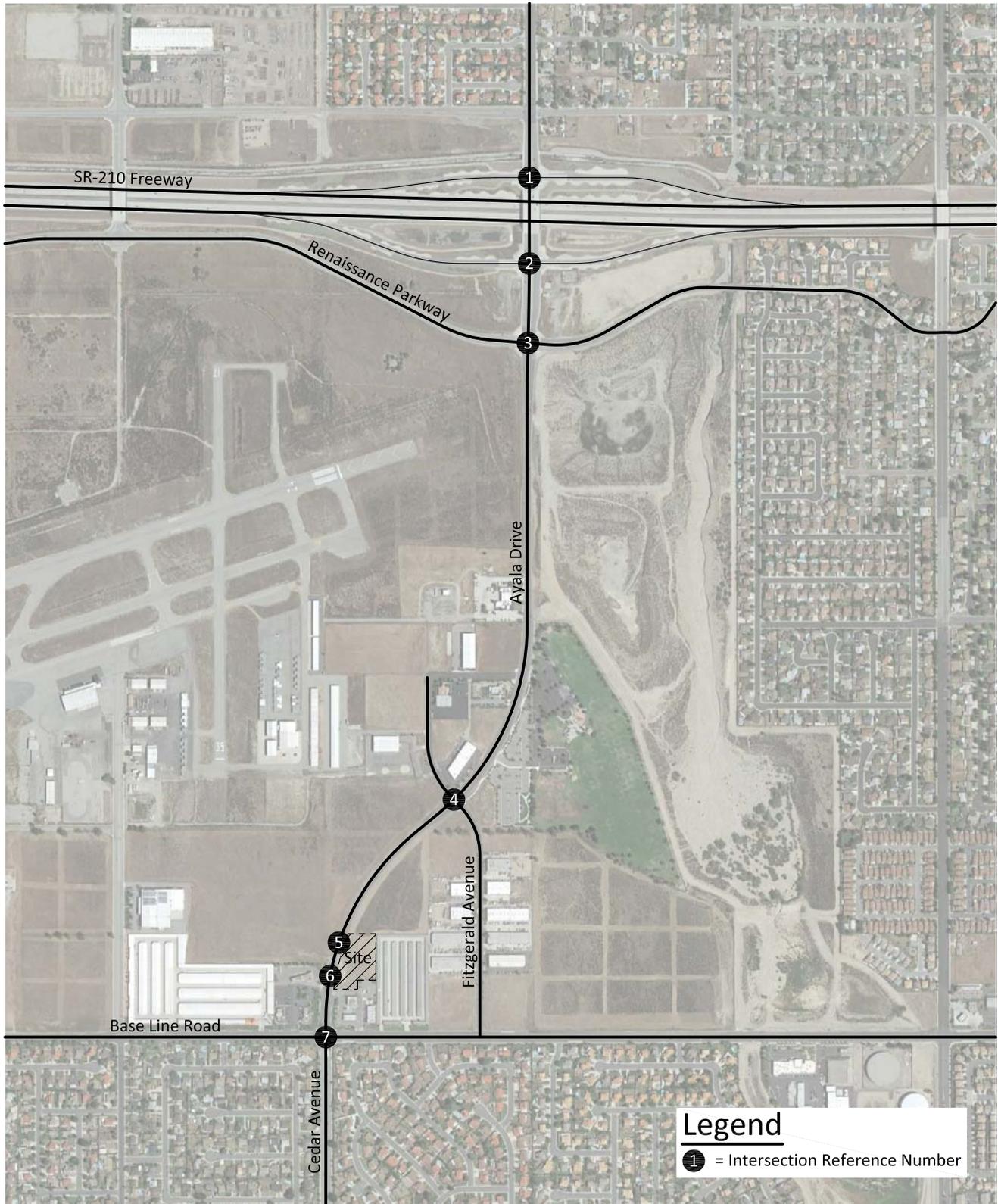
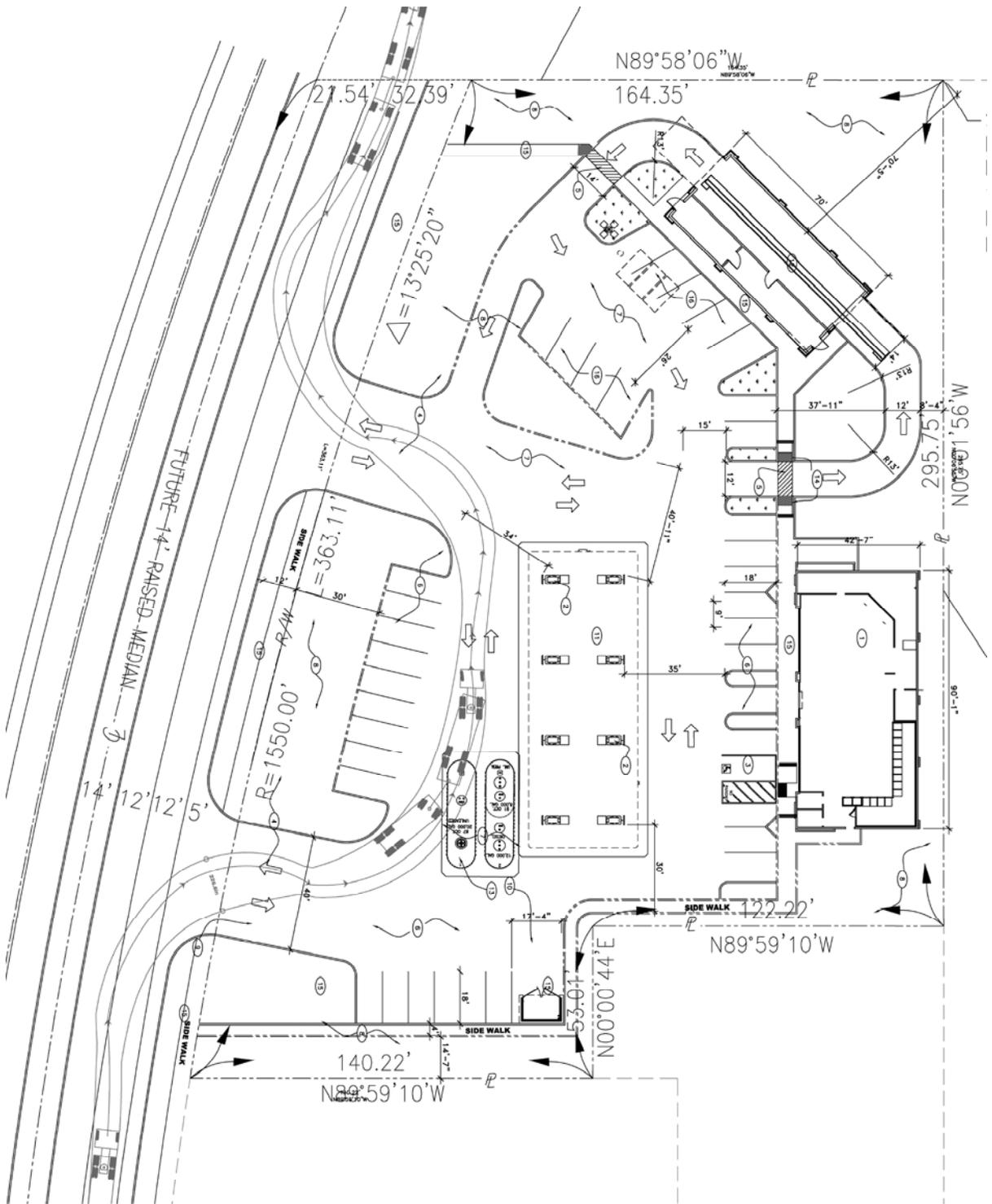


Figure 2  
Site Plan



**Table 3**  
**Project Trip Generation<sup>1</sup>**

Land Use	Quantity	Units <sup>2</sup>	Morning			Evening			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
<u>Trip Generation Rates</u>									
Gasoline/Service Station with Convenience Market and Car Wash		FP	6.04	5.80	11.84	7.07	6.79	13.86	152.84
<u>Trips Generated</u>									
Gasoline/Service Station with Convenience Market and Car Wash	16	FP	97	93	190	113	109	222	2,445
- Pass-By Trip Reduction (25%)			-24	-23	-47	-28	-27	-55	-611
<b>Total</b>			<b>73</b>	<b>70</b>	<b>143</b>	<b>85</b>	<b>82</b>	<b>167</b>	<b>1,834</b>

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Category 946.

Pass-by trip reduction from the City of Rialto Public Works Department, Traffic Impact Analysis Report Guidelines and Requirements, December 2013.

Although the Institute of Transportation Engineers, Trip Generation Handbook - 3rd Edition, August 2014 has a pass-by trip reduction greater than 25%, the maximum allowable pass-by trip reduction of 25% for the City of Rialto has been utilized.

<sup>3</sup> FP = Fueling Positions

**Table 10**

**Project Fair Share Traffic Contributions<sup>1</sup>**

Intersection								
Intersection	Peak Hour	Total Cost	Traffic Volumes				Project % of New Traffic	Project Cost Share
			Existing	Cumulative	Project	Total New		
Ayala Drive (NS) at:								
Renaissance Parkway (EW) - #3 <sup>2</sup>	Morning	\$ 335,331	2,413	3,370	69	957	7.2%	\$24,177
	Evening		2,232	4,057	83	1,825	4.5%	
Fitzgerald Avenue (EW) - #4 <sup>3</sup>								
	Morning	\$ 150,400	1,948	2,311	73	363	20.1%	\$30,246
	Evening		1,823	2,631	86	808	10.6%	
Baseline Road (EW) - #7 <sup>4</sup>								
	Morning	\$ 145,796	2,522	3,750	77	1,228	6.3%	\$9,142
	Evening		2,545	4,176	88	1,631	5.4%	
Total								\$63,565

Roadway Segment								
Roadway Segment	Total Cost	Traffic Volumes				Project % of New Traffic	Project Cost Share	
		Existing	Cumulative	Project	Total New			
Ayala Drive:								
Renaissance Parkway to Fitzgerald Avenue <sup>5</sup>	\$ 266,667	22,400	30,700	900	8,300	10.8%	\$28,916	
Fitzgerald Avenue to Baseline Road <sup>5</sup>	\$ -	19,500	26,600	1,000	7,100	14.1%	\$0	
Total								\$28,916

<sup>1</sup> Improvement included within the 2011 San Bernardino Associated Governments (SANBAG) Development Mitigation Nexus Study. Project applicant shall make the Development Impact Fee (DIF) payments to the City of Rialto upon issuance of building permit. The City of Rialto shall coordinate with SANBAG to ensure that the improvements are completed prior to 2035.

<sup>2</sup> Improvement includes an additional eastbound left turn lane.

<sup>3</sup> Improvement includes installation of a traffic signal.

<sup>4</sup> Improvements include additional northbound and eastbound left turn lanes.

<sup>5</sup> Improvements include widening Ayala Drive from 3 to 4 lanes.

# CITY OF RIALTO

## TRANSPORTATION COMMISSION STAFF REPORT

For Commission Meeting of October 5, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Traffic Impact Analysis – Warehouse Development at Southeast Corner of Renaissance Parkway and Palmetto Avenue
DATE:	September 6, 2016

### **BACKGROUND:**

The project is located at the southeast corner of Renaissance Parkway and Palmetto Avenue as generally shown on **page 6 of the TIA in Exhibit 1-2** which is included as **Attachment 1**.

This project is the construction of three separate buildings totaling 340,715 square feet and listed as warehouse development. The site plan is shown on **page 2 of the TIA as Exhibit 1-1** which is included as **Attachment 2**. One building is 210,628 square feet, the second is 77,047 square feet and the third is 53,040 square feet. The project did require a zone change to allow warehouse construction and that has been processed through Development Services Department. The scoping agreement showed four proposed driveways but the final TIA proposes only three driveways. The TIA does not state the size of the driveways but the original scoping agreement did state the sizes. Driveway #1 onto Palmetto Avenue is passenger vehicles only and provides full access and was listed as 26 feet wide. Driveway #2 is onto Renaissance Parkway approximately 832 feet east of Palmetto Avenue, is proposed as a full access driveway for both trucks and passenger vehicles, and is approximately 50 feet in width. Driveway #3 is approximately 1247 feet east of Palmetto Avenue and 415 feet east of driveway #2 and is for both passenger vehicles and trucks but is restricted to right in/right out movements. It was listed as 40 feet wide. On **page 21 in Exhibit 1-4**, which is included as **Attachment 3**, driveways #2 and #3 are shown as having radiuses 35-feet on driveway #2 and 45-feet on driveway #3 to allow larger trucks to make the turns into and out of the driveways and clear the median. Driveway #3 is approximately 850 feet from the proposed main access to the development on the northwest corner of Renaissance Parkway and Alder Avenue, which the Commission discussed some months ago. Truck circulation appears to be dead end at all truck docks. That is, trucks enter and exit the loading docks in only one direction and there is no circulation around the buildings. Building #1 does appear to have passenger vehicle circulation but it does not appear trucks could make the required turns to circulate around the structure.

The trip impacts were estimated using standard ITE rates for warehouse. The trip impacts using standard rates and PCE conversion rates from the CMP are shown on **page 68 of the TIA in Table 4-3**, which is included as **Attachment 4**, and the project generates 2,033 daily trips with 173 AM peak hour trips and 184 PM peak hour trips.

The traffic counts were taken in March and April of 2016.

The project will be required to complete street improvements along Ayala Drive and is aware a raised median will be required. At Palmetto Avenue, jurisdiction changes from Rialto on the east side to Fontana on the west side. Renaissance Specific Plan calls for a 108-foot right of way and 18-foot wide median whereas Fontana proposes a 104-foot right of way and 14-foot median. The actual transition area has not been worked out nor has the centerline alignment of Renaissance Parkway. Consideration is being given to the exist five Edison poles across the frontage of this parcel which, if left in place, would cause Renaissance Parkway to shift north by several feet. This will render the property between the north curb of Renaissance Parkway and the Caltrans SR-210 right of way more or less undevelopable. It is not clear who would be responsible for construction of the northerly curb/gutter, sidewalk, street lighting and other improvements or who might maintain the landscaping.

### **ANALYSIS/DISCUSSION:**

The project TIA considered seven intersections including the two proposed driveways along Renaissance Parkway and the driveway along Palmetto Avenue. These were the only intersections having 50 or more trips in the peak hours based on the proposed distribution of traffic. The TIA also considered roadway segments along Renaissance Parkway both east and west of Palmetto Avenue and along Alder Avenue from Renaissance Parkway and SR-210 interchange ramps.

This analysis is based on standard warehouse rates and Rialto truck splits. It made PCE conversions using CMP rates. The TIA analyzed existing and forecast peak hour intersection operations to determine potential impacts on peak hour level of service. It used current traffic counts (6 months old) and appears to be consistent with other recent TIA's and traffic projections. The TIA included analysis of operational issues on the SR-210 and included queuing analysis for driveways and ramps.

**Page 84 Section 5.9, page 101, Section 6.9, and page 134, Section 8.10 (Attachment 5)** all discuss improvements and suggest no improvements are required. Much of this conclusion is related to a comparison of horizon year with and without project or with and without cumulative traffic and the conclusion that the project is not, by itself, creating the need for improvements. However, back on **Page 11 Section 1.5 and page 12-13 Table 1-5 and 1-6 (Attachment 6)** fair share contributions have been presented based on percentage of traffic shown **on Page 16 in Table 1-7** which is included as **Attachment 7**. Footnote 8 on Table 1-5 acknowledges that additional studies are underway on the SR-210 interchange at Alder Avenue and changes could take place. Fair share contributions are made on improvement already suggested and discussed in previous projects in the area.

The TIA Mitigation Measures for intersection and roadway segment improvements are shown in **on page 12 and 13** of the TIA, which are included as **Attachment 6**.

The report proposes to pay a fair share of improvements as listed below and as shown on **paged 12 and 13 in Tables 1-5 and Table 1-6** of the TIA which are included as **Attachment 6**.

- Pay fair share of improvements at Palmetto Avenue and Renaissance Parkway (intersections #1) with construction of a traffic signal at 3.0% or \$14,247

- Pay fair share of improvements at Alder Avenue and SR-210- westbound ramps (intersection #5) with installation of new striping for left turn lanes and right turn lanes at 2.9% or \$8,218
- Pay fair share of improvements at Alder Avenue and SR-210 eastbound ramps (intersection #6) with additional northbound right turn lane, restripe on/off ramps to provide additional turn lanes at 4.3% or \$17,500
- Pay fair share of Alder Avenue at Renaissance Parkway to provide additional turn lanes at 4.2% or \$8,335
- Pay fair share of upgrade of Alder Avenue to 6 lane between Renaissance Parkway and SR-210 at 5.3% or \$38,869

The total fair share payments for intersections and segments totals \$88,135 including administrative overhead.

These fair share estimates are based on the amount of traffic this project adds to the total projected 2035 traffic.

Fair share costs are consistent with other recently approved projects and mitigations except at the freeway interchange.

The TIA indicated all streets and intersection would operate at LOS D or better in all conditions and that payment of normal Development Impact Fees for traffic along with fair share amounts would address the impacts for this project.

### ***Conclusion***

The scoping agreement was completed April 25, 2016. A revised scoping agreement was completed July 11, 2016. The first TIA submitted August 8, 2016. A revised TIA (#2) was submitted September 1, 2016. The project generates 2033 trips with 173/184 AM/PM peak hour trips. The TIA analyzed seven intersections, three of which were project driveways, to determine the impacts. The conclusions of the TIA are that the project will not create any LOS below the level of D at any of the studied intersection if the recommended improvements are made.

Payment of normal traffic related DIF fees along with the noted fair share payments are deemed adequate for this project. The TIA does acknowledge that other improvements may be necessary at the interchange with SR-210 but that those studies are not yet complete.

**RECOMMENDATIONS:**

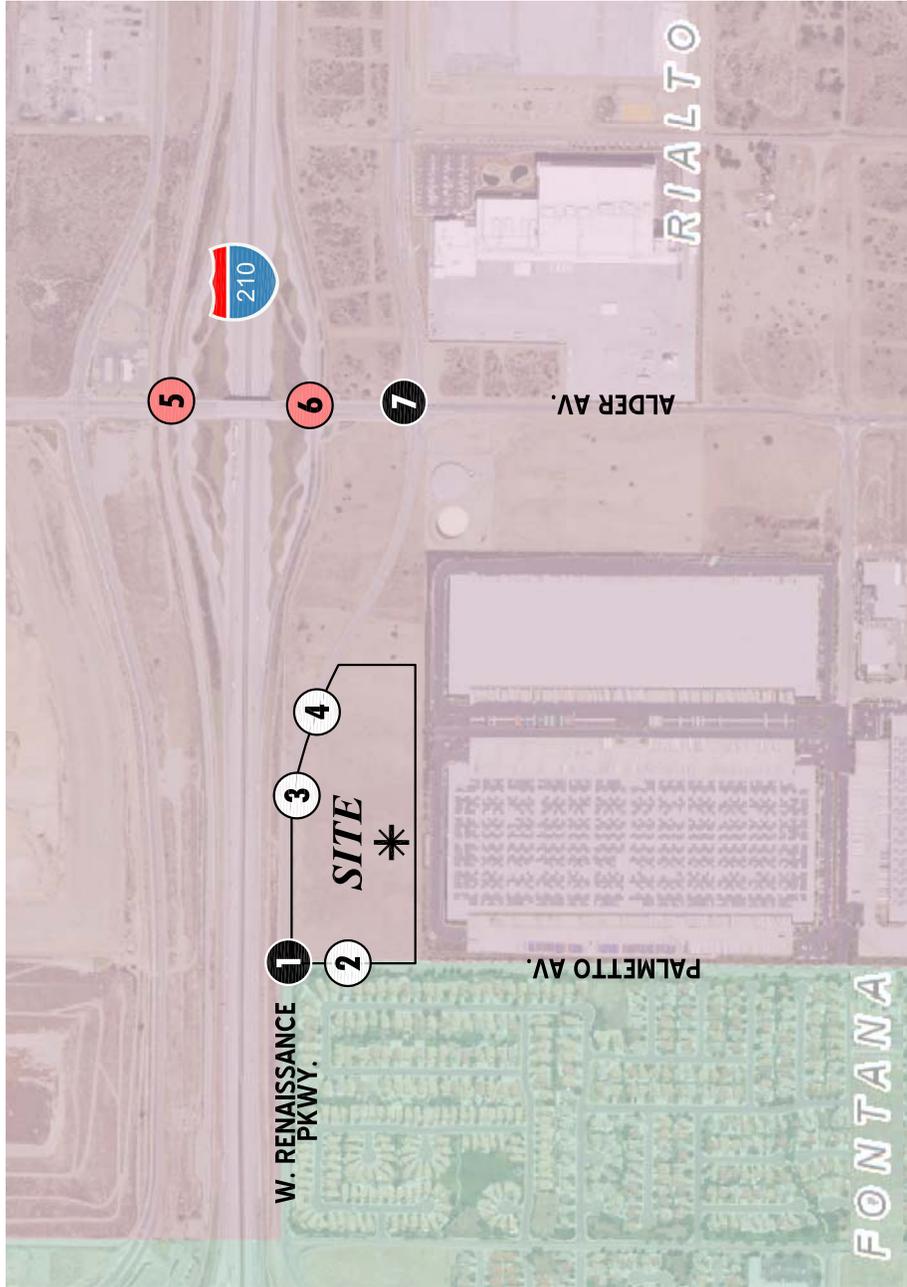
Staff requests that the Transportation Commission:

- Accept the Traffic Impact Analysis and its conclusions as complete.
- Make recommendations to the City Council that the project be approved.

Attachments:

- 1) Location Map
- 2) Preliminary Site Plan
- 3) Truck Access
- 4) Project Trip Generation Summary
- 5) Sections 5.9, 6.9 & 8.10
- 6) Section 1.5, Summary of Improvements Tables
- 7) Project Fair Share Calculations

EXHIBIT 1-2: LOCATION MAP

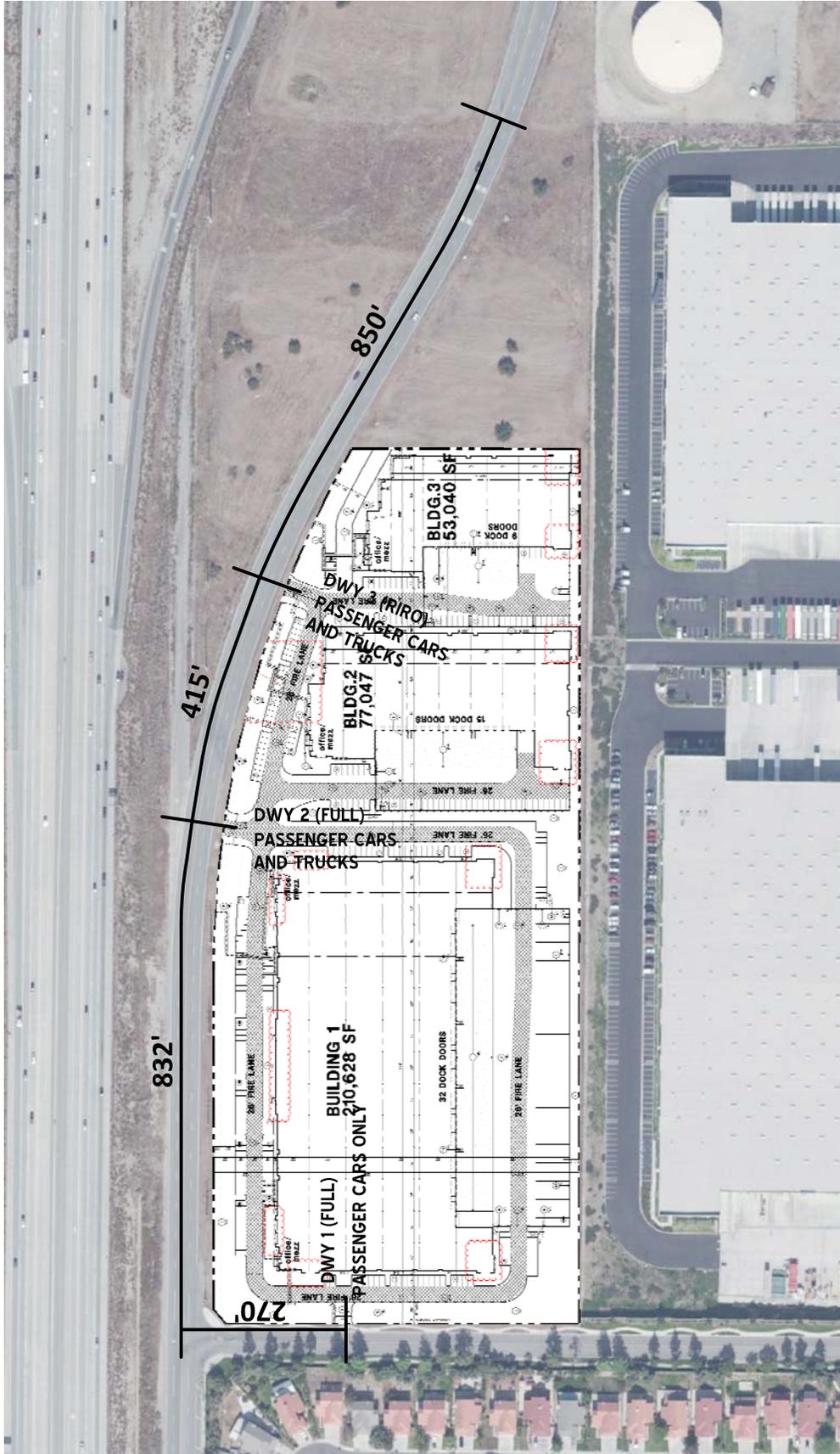


**LEGEND:**

-  - EXISTING INTERSECTION ANALYSIS LOCATION
-  - FUTURE INTERSECTION ANALYSIS LOCATION
-  = CMP INTERSECTION



**EXHIBIT 1-1: PRELIMINARY SITE PLAN**

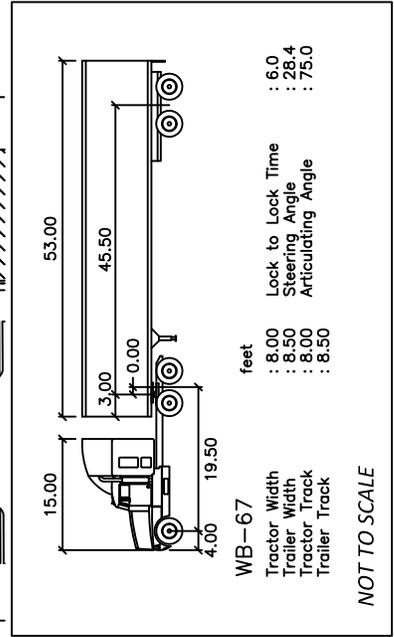
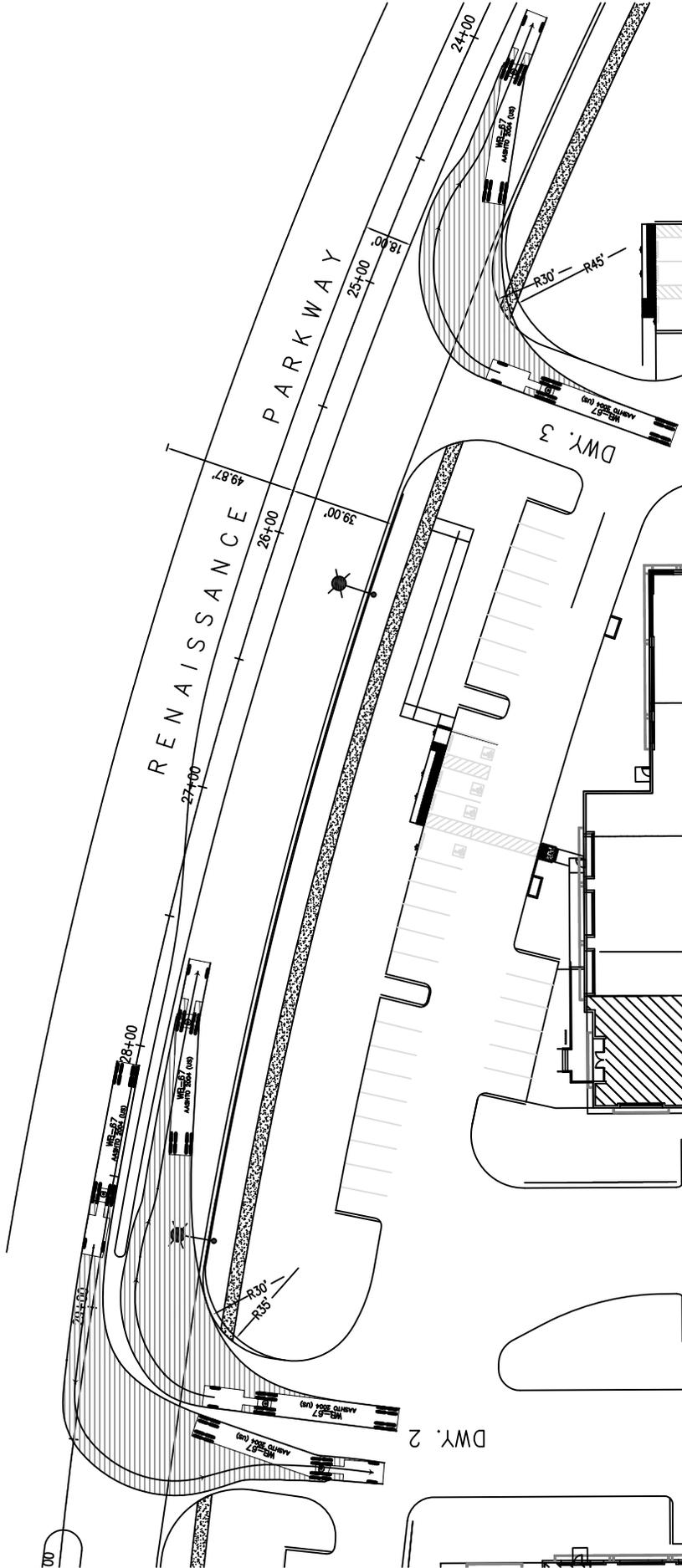


**LEGEND:**

- FULL = FULL ACCESS
- R/O = RIGHT-IN, RIGHT-OUT
- 850' = DISTANCE TO PROPOSED FULL ACCESS INTERSECTION



EXHIBIT 1-4: TRUCK ACCESS



NOT TO SCALE



Table 4-3

Project Trip Generation Summary (PCE)

Land Use <sup>1</sup>	Quantity	Units <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
BLDG. 1 (Warehousing)	210.628	TSF							
Passenger Cars:			30	8	38	10	30	40	450
Truck Trips:									
2-axle:			1	0	1	0	1	1	9
3-axle:			11	3	14	4	11	15	168
4+-axle:			42	11	53	14	42	57	630
- Net Truck Trips			54	14	68	18	54	73	807
<b>BLDG. 1 TOTAL</b>			<b>85</b>	<b>21</b>	<b>106</b>	<b>28</b>	<b>85</b>	<b>113</b>	<b>1,257</b>
BLDG. 2 (Warehousing)	77.047	TSF							
Passenger Cars:			11	3	14	4	11	15	165
Truck Trips:									
2-axle:			0	0	0	0	0	0	3
3-axle:			4	1	5	1	4	6	61
4+-axle:			16	4	19	5	16	21	230
- Net Truck Trips			20	5	25	7	20	27	295
<b>BLDG. 2 TOTAL</b>			<b>31</b>	<b>8</b>	<b>39</b>	<b>10</b>	<b>31</b>	<b>41</b>	<b>460</b>
BLDG. 3 (Warehousing)	53.040	TSF							
Passenger Cars:			8	2	10	3	8	11	113
Truck Trips:									
2-axle:			0	0	0	0	0	0	2
3-axle:			3	1	4	1	3	4	42
4+-axle:			11	3	14	4	11	15	159
- Net Truck Trips			14	4	18	5	14	19	203
<b>BLDG. 3 TOTAL</b>			<b>22</b>	<b>6</b>	<b>28</b>	<b>8</b>	<b>22</b>	<b>30</b>	<b>316</b>
<b>PROJECT TOTAL</b>			<b>138</b>	<b>35</b>	<b>173</b>	<b>47</b>	<b>138</b>	<b>184</b>	<b>2,033</b>

<sup>1</sup> Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Ninth Edition (2012).

<sup>2</sup> TSF = thousand square feet

## **5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS**

There are no traffic signals anticipated to meet either peak hour volume or planning level (daily volume) based traffic signal warrants with the addition of Project traffic for E+P traffic condition (see Appendix 5.2).

## **5.6 OFF-RAMP QUEUING ANALYSIS**

A queuing analysis was performed for the I-210 Freeway off-ramps at the Alder Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially “spill back” onto the I-210 Freeway mainline. Queuing analysis findings are presented in Table 5-3 for E+P traffic conditions. It is important to note that off-ramp storage lengths are consistent with the measured distance between the intersection and the freeway mainline.

As shown on Table 5-3, consistent with Existing traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows for E+P traffic conditions. Worksheets for E+P traffic conditions off-ramp queuing analysis are provided in Appendix 5.3.

## **5.7 BASIC FREEWAY SEGMENT ANALYSIS**

E+P mainline directional volumes for the AM and PM peak hours are shown on Exhibit 5-3. The I-210 Freeway segments analyzed for E+P traffic conditions are shown in Table 5-4, which indicates that the addition of Project traffic is not anticipated to result in any freeway segment LOS deficiencies. E+P basic freeway segment analysis worksheets are provided in Appendix 5.4.

## **5.8 FREEWAY MERGE/DIVERGE ANALYSIS**

Ramp merge and diverge operations were also evaluated for E+P traffic conditions and the results of this analysis are presented in Table 5-5. As shown in Table 5-5, the addition of Project traffic is not anticipated to result in any freeway ramp merge and diverge junction LOS deficiencies. E+P freeway ramp junction operations analysis worksheets are provided in Appendix 5.5.

## **5.9 RECOMMENDED IMPROVEMENTS**

### **5.9.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS**

Consistent with Existing traffic conditions, no improvement strategies have been recommended as there are no intersections that are anticipated to operate at an unacceptable LOS under E+P conditions.

## **6.9 RECOMMENDED IMPROVEMENTS**

### **6.9.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS**

No improvement strategies have been recommended as there are no intersections that are anticipated to operate at an unacceptable LOS under EAP (2018) conditions.

### **6.9.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT ROADWAY SEGMENTS**

There are no roadway segments anticipated to operate at an unacceptable LOS under EAP (2018) traffic conditions. As such, no improvements have been recommended.

### **6.9.3 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON FREEWAY FACILITIES**

No improvement strategies have been recommended as there are no freeway mainline segments or ramp junctions of the I-210 Freeway that were analyzed for this study that are anticipated to operate at an unacceptable LOS under EAP (2018) conditions.

## **8.10 HORIZON YEAR (2040) CUMULATIVE IMPACTS AND RECOMMENDED IMPROVEMENTS**

Improvement strategies have been recommended at intersections and freeway segments that have been identified as impacted under Horizon Year (2040) traffic conditions in an effort to achieve an acceptable LOS.

### **8.10.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS**

The effectiveness of the recommended improvements to address Horizon Year (2040) traffic impacts are presented in Table 8-6. Improvements shown in Table 8-6 have been recommended at intersections that have been identified as cumulatively impacted to reduce each location's peak hour delay to acceptable levels. The intersection operations analysis worksheets for Horizon Year (2040) Without and With Project traffic conditions, with improvements, are included in Appendix 8.10 and 8.11 of this TIA.

The applicant shall participate in the funding of off-site improvements, including traffic signals that are needed to serve cumulative traffic conditions through the payment of the Renaissance Traffic Fee, City of Rialto DIF fees, or on a fair share basis (if the improvements are not included in the DIF fee program). These fees shall be collected by the City of Rialto, with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases. Table 1-5 (previously presented) summarizes the improvement needs at the off-site study area intersections and the associated rough order of magnitude fair share cost estimates.

### **8.10.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT ROADWAY SEGMENTS**

Alder Av. is designated as a Major Arterial (four-lane divided roadway) on the Renaissance Specific Plan Vehicular Circulation Plan. Full improvement of Alder Avenue to its ultimate configuration is a \$4.9 million project included in the City-wide DIF program. As shown on Table 8-7, the roadway segment of Alder Avenue, north of W. Renaissance Parkway, is anticipated to operate at acceptable LOS without the Project and would improve, but would still operate at an unacceptable LOS for Horizon Year (2040) With Project traffic conditions, with the future recommended improvements previously identified in Table 8-6. However, the intersections on either end of the deficient segment along Alder Avenue at the I-210 Eastbound Ramps and W. Renaissance Parkway are anticipated to operate at acceptable LOS with the improvements identified in Table 8-6 (recommended right turn lanes proposed to be trap lanes). As such, additional roadway segment widening beyond 6-lanes does not appear necessary along this segment and has not recommended. Table 1-6 (previously presented) summarizes the roadway segment improvement and the associated rough order of magnitude fair share cost estimate.

## Horizon Year (2040) Conditions

The following I-210 Freeway segment is anticipated to operate at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for Horizon Year (2040) traffic conditions, in addition to the locations previously identified for EAPC (2018) traffic conditions:

- I-210 Freeway Eastbound, East of Alder Av. (#4) – LOS F PM peak hour only

The following I-210 Freeway ramp merge and diverge area is anticipated to operate at an unacceptable LOS (i.e., LOS E or worse) for Horizon Year (2040) traffic conditions, in addition to the locations previously identified under EAPC (2018) traffic conditions:

- I-210 Freeway Westbound, Off-Ramp at Alder Av. (#2) – LOS E AM peak hour only
- I-210 Freeway Eastbound, On-Ramp at Alder Av. (#4) – LOS F PM peak hour only

The addition of Project traffic is not anticipated to result in any additional deficient freeway segments or ramp junctions.

## 1.5 RECOMMENDED IMPROVEMENTS

### 1.5.1 INTERSECTIONS

Table 1-5 lists the recommended intersection improvements necessary to reduce the identified intersection LOS deficiencies by traffic condition. In addition, Table 1-5 also indicates those improvements currently included in either the Renaissance Fee Program, City of Rialto, or Regional DIF. In instances where improvement needs are not covered by a pre-existing fee program, the Project's fair share percentage has been calculated.

### 1.5.2 ROADWAY SEGMENTS

Table 1-6 lists the recommended roadway improvement consistent with the identified intersection improvements shown previously in Table 1-5, by analysis scenario. In addition, Table 1-6 also indicates those improvements currently included in either the Renaissance Fee Program, City of Rialto, or Regional DIF fee programs. In instances where improvement needs are not covered by a pre-existing fee program, the Project's fair share percentage has been calculated.

Alder Avenue is designated as a Major Arterial (four-lane divided roadway) on the Renaissance Specific Plan Vehicular Circulation Plan. Full improvement of Alder Avenue to its ultimate configuration, including full sidewalk, curb, gutter, and landscaping, is a \$4.9 million project included in the City-wide DIF. DIF fees are being collected incrementally as development in the area is approved.

### 1.5.3 FREEWAY SEGMENTS

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the City of Rialto (or other neighboring jurisdictions) on SHS roadway segments. As such, no improvements have been recommended to address the EAPC cumulative deficiencies on the SHS.

Table 1-5

Summary of Improvements and Rough Order of Magnitude Costs for Horizon Year (2040) Conditions

#	Intersection Location	Jurisdiction	Analysis Scenarios					Improvements included in a fee program?	Estimated Total Cost <sup>2</sup>	Cost included in a fee program	Fair Share % <sup>3</sup>	Estimated Fair Share Cost <sup>4,5</sup>
			Existing	E+P	EAP (2018)	EAPC (2018)	2040 Without Project					
1	Palmetto Av. / Renaissance Pwy.	Rialto, Fontana	None	None	None	None	Install a traffic signal WB left turn lane <sup>6</sup>	Same	\$0	3.0%	\$12,051	
							WB left turn lane <sup>6</sup>	Same	\$0		\$2,196	
							<b>Total</b>		<b>\$0</b>		<b>\$14,247</b>	
5	Alder Av. / I-210 Westbound Ramps <sup>8</sup>	Caltrans, Rialto	None	None	None	Restripe to provide a 2nd NB left turn lane Restripe to provide a SB right turn lane Restripe to provide a 2nd WB left turn lane	Same	Yes <sup>7</sup>	\$29,875	2.9%	\$2,739	
						Same	Same	Yes <sup>7</sup>	\$29,875		\$2,739	
						Same	Same	Yes <sup>7</sup>	\$29,875		\$2,739	
						<b>Total</b>		<b>Total</b>	<b>\$89,625</b>		<b>\$8,218</b>	
6	Alder Av. / I-210 Eastbound Ramps <sup>8</sup>	Caltrans, Rialto	None	None	None	Restripe to provide a NB right turn lane Restripe to provide a 2nd SB left turn lane Restripe to provide a 2nd EB left turn lane 2nd EB right turn lane	Same	No	\$0	4.3%	\$5,390	
						Same	Same	Yes <sup>7</sup>	\$94,125		\$1,331	
						Same	Same	No	\$0		\$5,390	
						Same	Same	No	\$0		\$5,390	
						<b>Total</b>		<b>Total</b>	<b>\$94,125</b>		<b>\$17,500</b>	
7	Alder Av. / Renaissance Pkwy.	Rialto	None	None	None	Restripe to provide 2nd SB through lane 2nd EB left turn lane	Same	No	\$0	4.2%	\$5,265	
						Same	Same	No	\$0		\$3,070	
						<b>Total</b>		<b>Total</b>	<b>\$0</b>		<b>\$8,335</b>	
<b>Total Costs (including 2% administrative overhead for City)</b>									<b>\$1,545,796</b>		<b>\$48,300</b>	
<b>Total Costs (including 2% administrative overhead for City)</b>									<b>\$1,576,712</b>		<b>\$49,266</b>	

<sup>1</sup> Program improvements constructed by project may be eligible for fee credit, at discretion of City.

<sup>2</sup> Costs have been estimated using the data provided in Appendix G of the San Bernardino County CMP (2003 Update) for preliminary construction costs. Because these costs were determined in 2003, they were adjusted for inflation using the Engineering News Record (ENR) construction cost index as approved by City staff.

<sup>3</sup> Represents the highest fair share percentage for the project (see Table 1-7).

<sup>4</sup> Rough order of magnitude cost estimate.

<sup>5</sup> The project fair share was not credited at locations where there is excess funding from the SANBAG CMP or Renaissance Fee Program.

<sup>6</sup> Project will be constructing a 200-foot westbound left turn lane at the intersection as part of their site adjacent improvements.

<sup>7</sup> Included in Renaissance Fee Program, to supplement the costs not covered by the fee program established by the SANBAG Nexus Study.

<sup>8</sup> It is our understanding that the City, in cooperation with Caltrans, have plans to further evaluate the Alder Avenue and I-210 Freeway interchange to identify future improvement needs. As such, the future improvements to the Alder Avenue/I-210 interchange are subject to change. The Project will be subject to contribute their fair share towards any future improvements identified by the City/Caltrans at the Alder Avenue/I-210 Freeway interchange.





Table 1-6

Summary of Roadway Segment Improvements

#	Roadway	Segment Limits	Jurisdiction	Analysis Scenarios					Improvements included in City or Regional DIF? <sup>1</sup>	Estimated Total Cost <sup>2</sup>	Cost included in a fee program	Fair Share % <sup>3</sup>	Estimated Fair Share Cost <sup>4</sup>
				Existing (2016)	E+P	EAP (2018)	EAPC (2018)	2040 Without Project					
2	Alder Av.	Between I-210 and Renaissance Pwy.	Rialto	None	None	None	Improved to a 6-lane divided facility	Same	Same	\$0	5.3%	\$38,107	
<b>Costs of Horizon Year (2040) Improvements</b>													
<b>Total Costs (including 2% administrative overhead for City)</b>													
											<b>\$38,869</b>		

<sup>1</sup> Recommended improvements are consistent with the General Plan designations of the respective jurisdictions in which they are located.

<sup>2</sup> Costs have been estimated using the data provided in Appendix G of the San Bernardino County CMP (2003 Update) for preliminary construction costs. Because these costs were determined in 2003, they were adjusted for inflation using the Engineering News Record (ENR) construction cost index as approved by City staff.

<sup>3</sup> Represents the highest AM/PM fair share percentage for the project (see Table 1-7).

<sup>4</sup> Rough order of magnitude cost estimate.

Table 1-7

Project Fair Share Calculations

#	Intersection	Existing	Project	2040 WP	Total New Traffic	Project % of New Traffic <sup>1</sup>
1	Palmetto Av. / Renaissance Pwy.	AM: 562	31	1,591	1,029	<b>3.0%</b>
		PM: 501	33	1,772	1,271	2.6%
5	Alder Av. / I-210 Westbound Ramps	AM: 1,867	66	4,159	2,292	<b>2.9%</b>
		PM: 1,795	65	4,227	2,432	2.7%
6	Alder Av. / I-210 Eastbound Ramps	AM: 1,567	123	4,552	2,985	4.1%
		PM: 1,779	130	4,794	3,015	<b>4.3%</b>
7	Alder Av. / Renaissance Pkwy.	AM: 1,576	136	4,805	3,229	<b>4.2%</b>
		PM: 1,643	144	5,175	3,532	4.1%
	Alder Av. between I-210 and Renaissance Pkwy.	AM: 1,131	123	3,557	2,426	5.1%
		PM: 1,208	130	3,675	2,467	<b>5.3%</b>

**BOLD** Highest fair share percentage is highlighted.

<sup>1</sup> Project percentage of new traffic between Existing (2016) and Horizon Year (2040) traffic conditions. Fair Share percentage of most impacted peak hour is highlighted.

# CITY OF RIALTO

## TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of October 5, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Focused Traffic Impact Analysis – Coffee Bean & Tea Leaf Development at Southeast Corner of Riverside Avenue and Easton Street.
DATE:	September 20, 2016

### **BACKGROUND:**

The project is located at the southeast corner of Riverside Avenue at Easton Street as generally shown on **page 1A of the TIA in Figure 1**, which is included as **Attachment 1**. When first submitted in the scoping agreement, the single use project was relatively small but as a drive thru generated relatively high traffic numbers. Due to location at an existing intersection with congestion and with that intersection seeing more than 50 peak hour trips, a focused traffic study was requested. There was also concern for the development to the north and the traffic it generates and current restrictions on turn movements at the driveway to that existing development.

This project is the construction of a 1,650 square foot drive thru coffee shop. The site plan is shown on **page 3B of the TIA as Figure 2-2**, which is included as **Attachment 2**. The project has been processed through Development Services Department, the Planning Commission, thru the DRC process, and was declared exempt from CEQA. However, the adopted Traffic Policy still requires analysis of the traffic impacts to conform to the CMP and City policy.

The final TIA proposes two driveways. The TIA does not state the size of the driveways. Driveway #1 onto Riverside Avenue right in/right out only and is an existing driveway to the vacant lot. The plan is dimensioned as 26 feet wide but the exiting driveway appears to be approximately 40 feet wide. It is along the south property line and immediately adjacent to another driveway to a medical office building to the south. Driveway #2 is onto Easton Street and is right in/right out only. It may or may not be at the location of the existing driveway but is shown as 26 feet wide. The existing driveway on Easton Street is approximately 40 feet in width.

The trip impacts were estimated using standard ITE rates for drive thru coffee/donut shop. The trip impacts using standard rates are shown on **page 15 of the TIA in Table 5-1**, which is included as **Attachment 3**, and the project generates 1,351 daily trips with 166 AM peak hour trips and 71 PM peak hour trips before allowance for pass-by trips. Pass-by was allowed at 25% daily, 50% AM and 25% PM peak hour trips due to the nature of the business. With allowance for pass-by trips, the ADT adjusts to 1,013 with 83/53 AM/PM peak hour trips. However, the driveways still have the full impact of non-pass-by trips. Background growth to the project year 2018 is included in the analysis. It is noted that cumulative growth traffic for other projects is shown on **page 18 in Table 6-1**, which is included as **Attachment 4**, but it is well below what

has been approved for the projects listed. On page **19 in Table 6-2**, which is included as **Attachment 5**, the cumulative projects trip generation is understated based on approved TIA's already accepted for four of the projects listed. ADT is approximately 11% underestimated and PM peak hour is 32% underestimated.

The traffic counts were taken in May of 2016.

The project will be required to complete street improvements along Riverside Avenue and Easton Street although curb, gutter and walk exist (repairs may be needed) and it is unclear if the existing driveways will be modified or relocated.

Four intersections were considered. The intersections are Riverside Avenue at the SR-210 ramps (2), Riverside Avenue at Easton Street and Easton Street at Highland Avenue (east of project site) as well as the two driveways.

### **ANALYSIS/DISCUSSION:**

The project TIA considered six intersections including the two proposed driveways to the project. The TIA also considered roadway segments along Riverside Avenue both north and south of Easton Street to the SR-210 interchange ramps.

The analysis is based on standard coffee/donut shop with drive thru trip rates. The TIA analyzed existing and forecast peak hour intersection operations to determine potential impacts on peak hour level of service. It used current traffic counts (5 months old).

**Figure 5-2 on page 15B and Figure 5-3 on page 15C (Attachment 6)** appears to be for the same period, AM peak hour, project traffic only, yet show different results. It also seems that it shows only the net difference in/out at both driveway A and B. That is, the numbers shown for driveway traffic reflect only the net after pass-by deductions, which is incorrect. The driveways actually see the total traffic in and out and combined should reflect 166 AM peak hour trips and 71 PM peak hour trips indicating the actual numbers using the driveways. This affects later queue analysis and operational analysis of the driveways. It is also not clear in the figures what the negative numbers reflect or how they affect the analysis.

On page 32 in section 10.2, queuing is discussed. No supporting data was included in the TIA in support of the conclusions that only a single car would queue at the driveway. Considering the traffic volume on Riverside Avenue and the proximity of the driveway to Easton Street, (approximately 100 feet) which is signal controlled along with the TIA conclusion that 20% of exiting vehicles will attempt to cross 3 lanes of thru traffic to enter the left turn pocket it seems optimistic to assume there will never be more than one car queued to exit. Year 2018 AM peak hour traffic is projecting 272 northbound left turns in a 115-foot long turn pocket. Additionally, the projection is for 905 thru movements and 283 right turns for northbound traffic with a projected LOS at F and D on those movements. Again, a single car queue for exiting seems optimistic at best.

There is no discussion of interconnected signals or timing other than to mention that right turn overlap is recommended. These signals are timed with the signals at SR-210 and as such cannot be changed without consideration of interconnection timing. The first ramp north of Easton Street is approximately 340 feet with 280 feet between the east and westbound ramps. The southbound Riverside Avenue right turn overlap would not seem to provide any benefit to

the project or overall to the intersection as 2018 projections are for 60/158 AM/PM turn movements. The westbound Easton Street overlap would seem to address the 431/623 AM/PM turn movements. If all restrictions on U-turn are removed, the overlap could create conflicts with the allowed U-turn movements.

In order to mitigate in and out movements to the project, the TIA recommends removal of the no left turn restrictions at Riverside Avenue/Easton Street in section 11.1. The restrictions were place because the existing lane configuration does not allow U-turns for many vehicles and created conflict in the intersection. The TIA does not say how this existing concern is addressed but does show the northbound left turn lane moved approximately 8 feet east of the current location. It is noted that conflict with the southbound dual left turn lanes may be created if all NO U-turn signs are removed. In section 11.2 on page 34 it also mentions right turn overlap for both southbound and westbound traffic but this is not carried forward into the fair share section of the report. Only the westbound Easton Street overlap is mentioned. Further, in section 11.3 on page 34, it discusses the need to widen Riverside Avenue and provide an exclusive northbound right turn at Easton Street. However, this is not included in cost sharing and it would appear that the necessary right of way would not exist once this development is completed. The current site plan does not provide sufficient space for future creation of this additional lane.

**Figure 11-2 on page 35B**, which is included as **Attachment 7**, shows how a sedan size vehicle might make U-turns but does not show potential conflict with opposing U-turns or how full size pickup or other larger vehicles might make such a U-turn. It is not clear how signing could allow U-turns for smaller vehicles but prohibit it for larger vehicles. The Easton Street U-turn does seem to require going south of the intersection to complete the turn and both U-turns have wheel tracks against the curb as seen in figure 11-2.

**Pages 37-39 Section 12**, which is included as **Attachment 8**, discuss improvements and suggests no improvements are required. It concludes that removal of the U-turn restrictions and a contribution to a southbound right turn overlap and westbound right turn overlap (but no improvements) will mitigate project impacts. Much of this conclusion is related to the conclusion that the project is not, by itself, creating the need for improvements and that the existing intersection is at LOS E. However, a fair share contribution has been presented showing a fair share contribution at \$2,072.00 but seems to include only a westbound Easton Street right turn overlap and nothing more.

The report proposes to pay a fair share of improvements in the total amount of \$2,072 as full obligation for multiple right turn overlap movements, widening of Easton Street/Riverside Avenue to include a northbound right turn lane and for relocation and restriping of the existing northbound left turn lane at Easton Street.

The total fair share payments for intersections and segments totals **\$2,072** including administrative overhead.

The TIA indicated streets would operate at LOS D for Riverside Avenue south of Easton Street and LOS E north of Easton Street (within 900 vehicles of being LOS F) and intersection would operate at LOS D in all conditions with installation of overlap and removal of U-turn restrictions.

Existing LOS at Riverside Avenue/Easton Street is E/F for AM/PM peak hour, 2018 with project is E/F AM/PM. Appendix C-VI shows the intersection Riverside Avenue/Easton Street at D/D

with improvements. However, the improvements include a dedicated northbound right turn lane at Easton Street and still have northbound left at LOS E and westbound left at LOS E in the AM. In the PM, northbound left is LOS F, southbound thru is LOS E, eastbound left at LOS F, eastbound thru and right at LOS E, and westbound left and right both at LOS E. The analysis also shows a change in the cycle length for the signal with no discussion of impact on coordinated signal systems.

### **Conclusion**

The first scoping agreement was completed March 28, 2016. A revised scoping agreement was completed May 2, 2016. The first TIA submitted August 10, 2016. A revised TIA (#2) was submitted September 19, 2016. The project generates 1351 trips with 166/71 AM/PM peak hour trips before pass-by deductions. With pass by deductions the ADT is 1013 trips with 83/53 AM/PM peak hour trips. Pass-by was 25% on ADT, 50% AM and 25% PM peak hour reductions. The TIA analyzed six intersections, two of which were project driveways, to determine the impacts. The conclusions of the TIA are that the project will not create any LOS below the level of D at any of the studied intersection if the recommended improvements are made. This was for 2018 project completion only and does not address any traffic issues beyond 2018. The segment LOS north of Easton Street will be LOS E and several legs of the intersection of Riverside Avenue/Easton Street will operate at LOS E or F. The TIA does suggest that to meet ingress/egress needs for the site, the current restriction of U-turns should be eliminated.

It is proposed in the TIA that payment of normal traffic related DIF fees along with the proposed fair share payment of \$2,072 would be deemed adequate for this project. The TIA does acknowledge that other improvements may be necessary, including widening of Riverside Avenue and creation of northbound trap right turn lane at Easton Street. However, this is not included in the fair share calculations nor is right of way dedicated for the required lane.

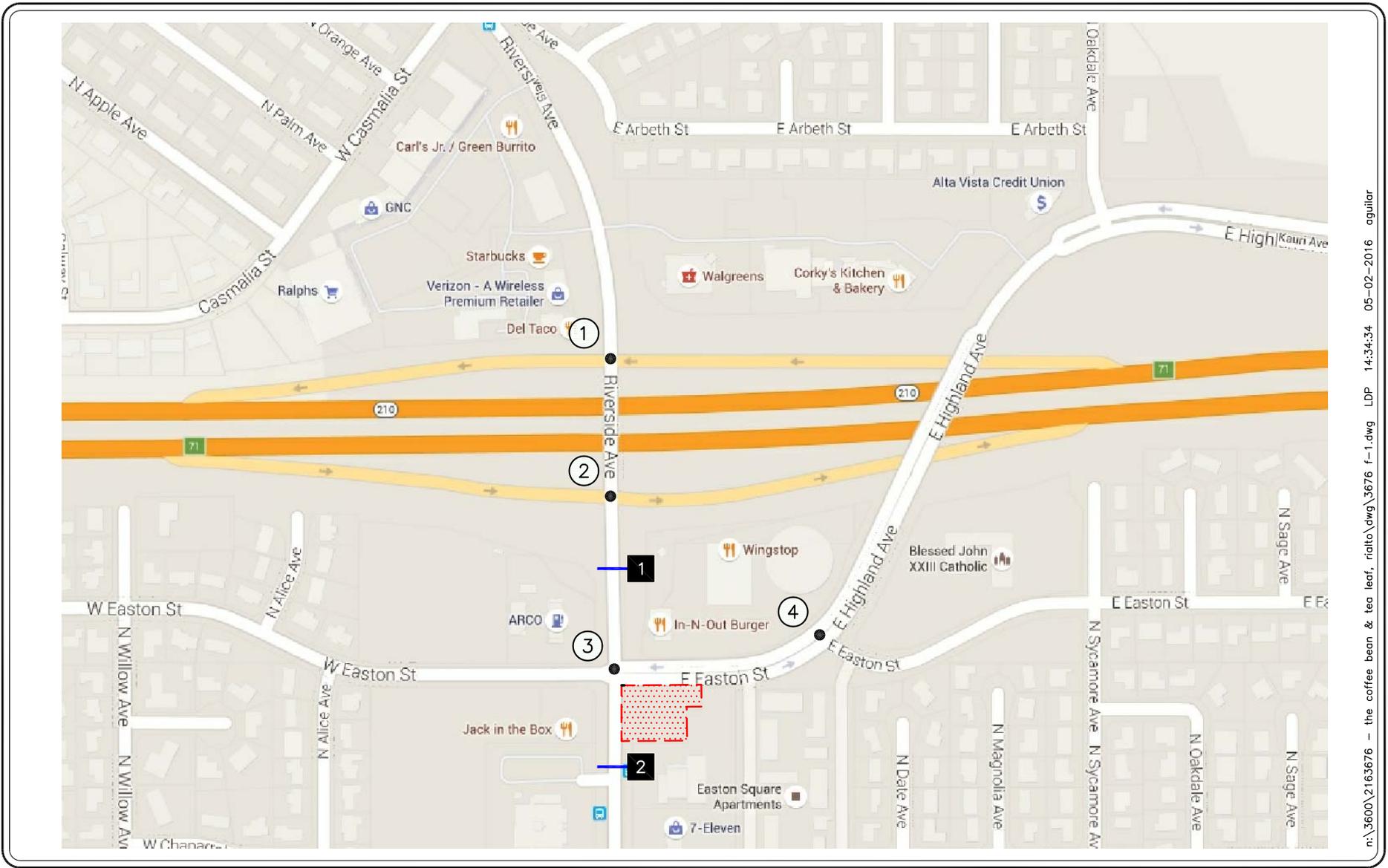
### **RECOMMENDATIONS:**

Staff requests that the Transportation Commission:

- Consider the Traffic Impact Analysis and its conclusions.
- Makes its observations/recommendations to the City Council.

Attachments:

- 1) Vicinity Map
- 2) Proposed Site Plan
- 3) Project Traffic Generation Forecast
- 4) Cumulative Projects Location & Description
- 5) Cumulative Projects Traffic Generation Forecast
- 6) AM Peak Hour Project Traffic Volumes & AM Peak Hour and Daily Project Traffic Volumes
- 7) Planned Improvements Conceptual Plan
- 8) Section 12.0 – Summary of Findings and Conclusions



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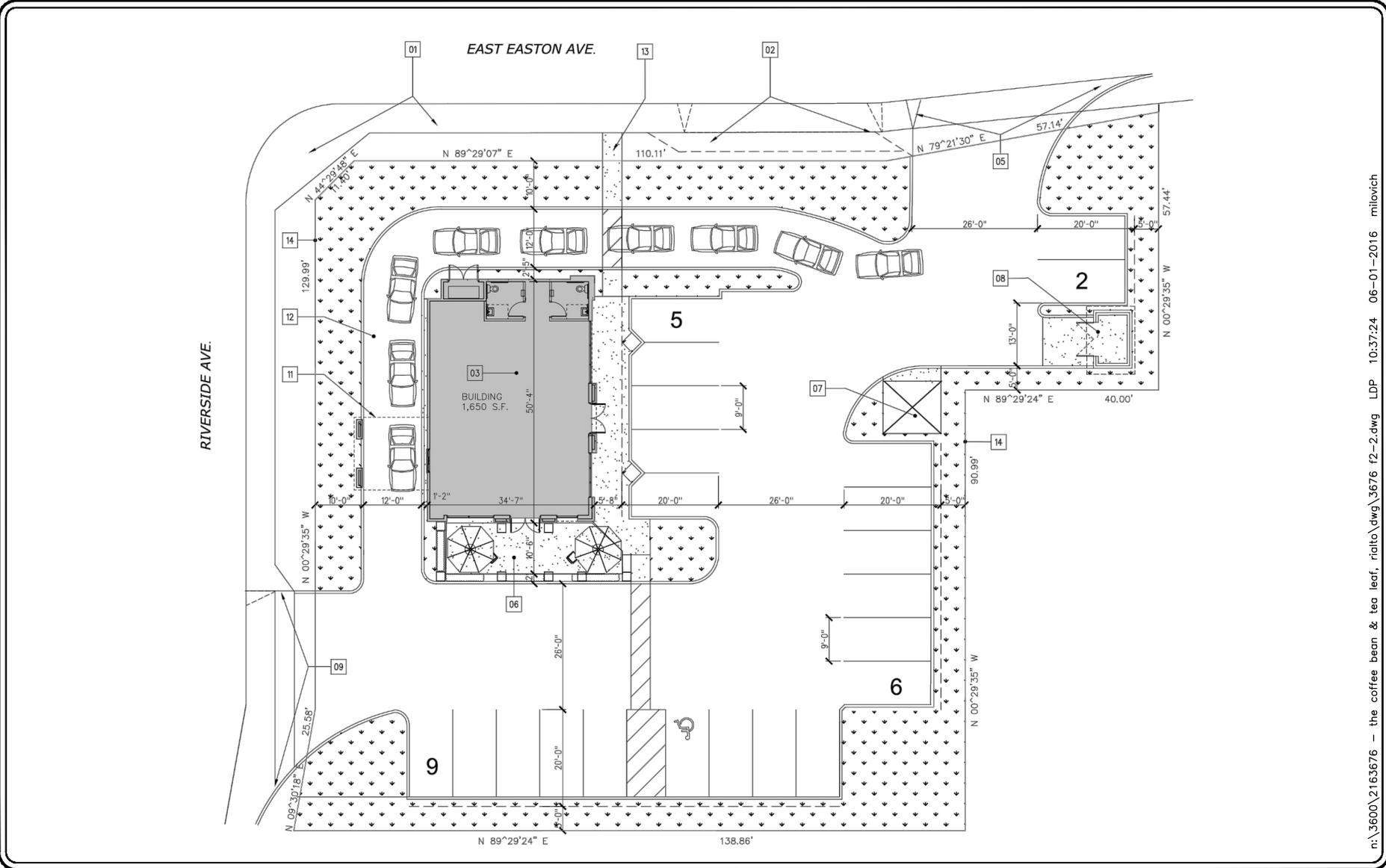
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**KEY**

- = STUDY INTERSECTION
- = STUDY ROADWAY SEGMENT
- = PROJECT SITE

# FIGURE 1

VICINITY MAP  
THE COFFEE BEAN & TEA LEAF, RIALTO



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SOURCE: BUNDY-FINKEL ARCHITECTS

FIGURE 2-2

PROPOSED SITE PLAN

THE COFFEE BEAN & TEA LEAF, RIALTO

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engineers

NO SCALE

TABLE 5-1  
PROJECT TRAFFIC GENERATION FORECAST<sup>3</sup>

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<b><u>Generation Factors:</u></b>							
▪ 937: Coffee/Donut Shop With Drive-Through (TE/1000 SF)	818.58	51.30	49.28	100.58	21.40	21.40	42.80
<b><u>Generation Forecast:</u></b>							
▪ The Coffee Bean & Tea Leaf (1,650 SF)	1,351	85	81	166	36	35	71
Pass-By (Daily: 25%, AM: 50%, PM: 25%) <sup>4</sup>	<u>-338</u>	<u>-42</u>	<u>-41</u>	<u>-83</u>	<u>-9</u>	<u>-9</u>	<u>-18</u>
Subtotal	1,013	43	40	83	27	26	53
<b>Total Trip Generation Forecast</b>	<b>1,013</b>	<b>43</b>	<b>40</b>	<b>83</b>	<b>27</b>	<b>26</b>	<b>53</b>

Notes:  
TE/1000 SF = Trip ends per 1,000 SF of development

<sup>3</sup> Source: *Trip Generation*, 9<sup>th</sup> Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).

<sup>4</sup> The *Trip Generation Handbook*, published by ITE (2014), does not include pass-by rates, so engineering judgment was utilized.

**TABLE 6-1**  
**CUMULATIVE PROJECTS LOCATION AND DESCRIPTION<sup>5</sup>**

Project Name	Location/Address	Description
1. I-210 Logistics II, LLC	Northeast corner of Base Line Road & Maple Avenue	763 TSF warehouse building
2. Monster Energy	Northeast corner of Miro Way and Locust Avenue	1,100 TSF warehouse building
3. Renaissance Marketplace	Southwest corner of Ayala Drive and Renaissance Parkway	430 TSF shopping center
4. Pepper Avenue SP	Southeast corner of 210 Freeway and Pepper Avenue	462 TSF commercial retail and 180 TSF office
5. Amit Salhotra	East side of Ayala Drive approx. 270 feet north of Base Line Road	8 fueling-position gas station with 3.6 TSF convenience store & 2.31 TSF carwash
6. 2114 W. Highland Avenue	2114 W. Highland Avenue	16 fueling-position gas station with 3.8 TSF convenience store & 2.8 TSF carwash; and 2 TSF retail building

Notes

- DU = Dwelling Units
- SF = Square-Feet

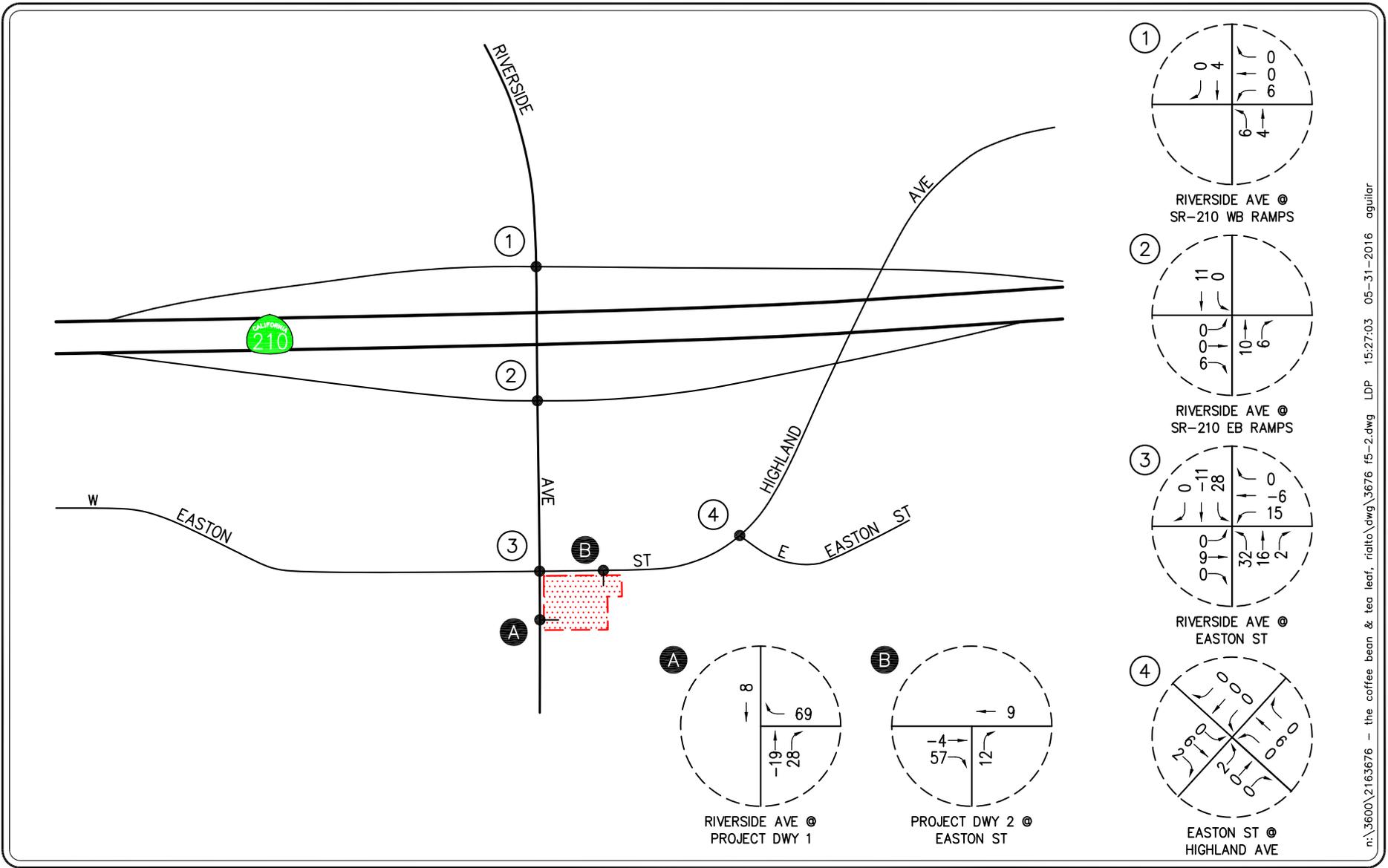
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<sup>5</sup> Source: City of Rialto Planning Department and City of San Bernardino Planning Department.

TABLE 6-2  
 CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST<sup>6</sup>

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. I-210 Logistics II, LLC	3,368	233	61	294	72	216	288
2. Monster Energy	4,856	335	89	424	104	311	415
3. Renaissance Marketplace	15,773	212	130	342	504	547	1,051
4. Pepper Avenue SP	18,512	468	170	638	575	795	1,370
5. Amit Salhotra	917	18	18	36	25	24	49
6. 2114 W. Highland Avenue	1,911	37	37	74	52	51	103
<b>Cumulative Projects Trip Generation Forecast</b>	<b>45,337</b>	<b>1,303</b>	<b>505</b>	<b>1,808</b>	<b>1,332</b>	<b>1,944</b>	<b>3,276</b>

<sup>6</sup> Source: *Trip Generation*, 9<sup>th</sup> Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).



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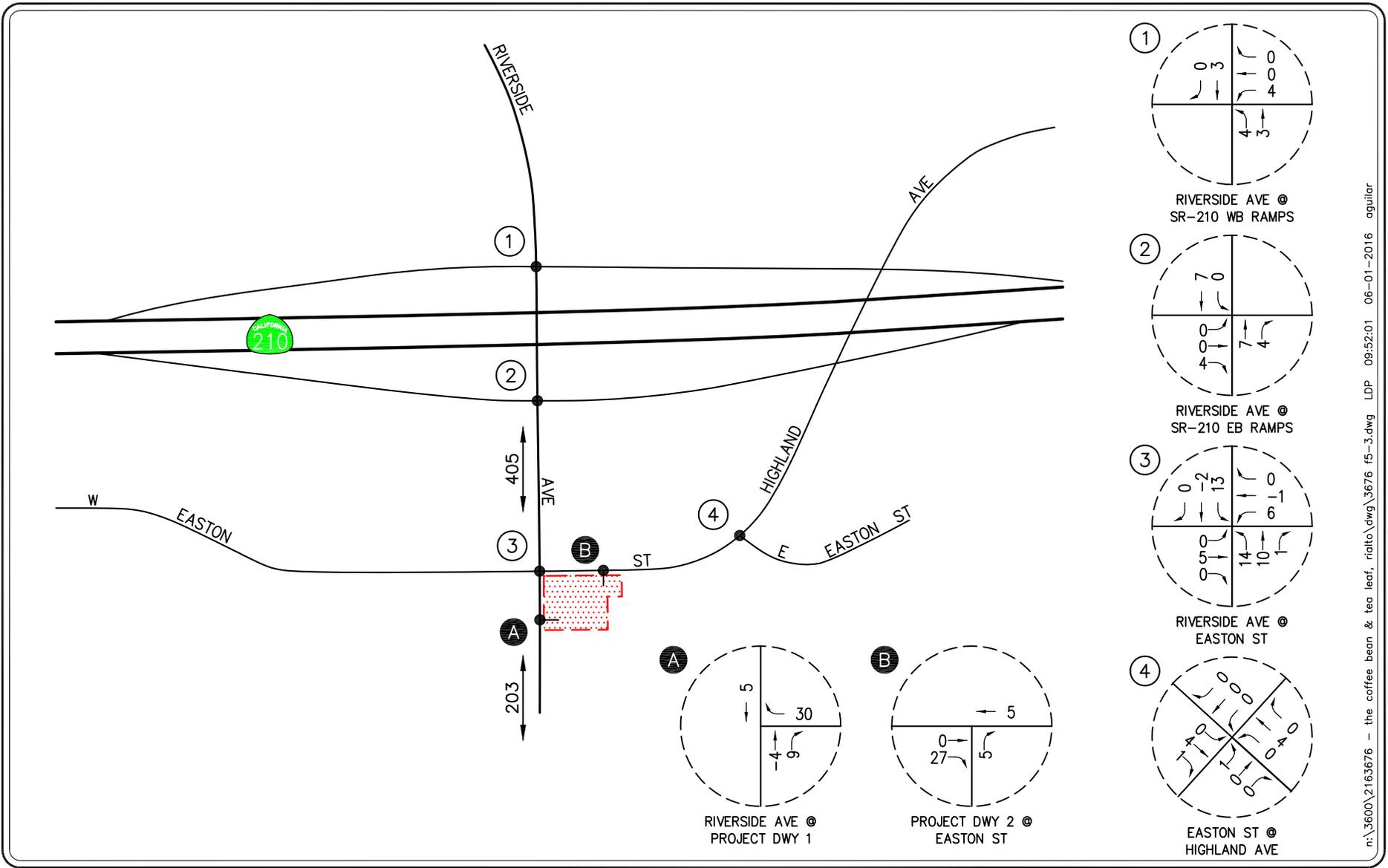
**KEY**

① = STUDY INTERSECTION

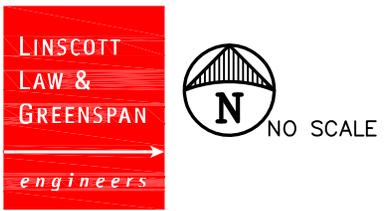
▨ = PROJECT SITE

## FIGURE 5-2

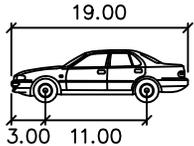
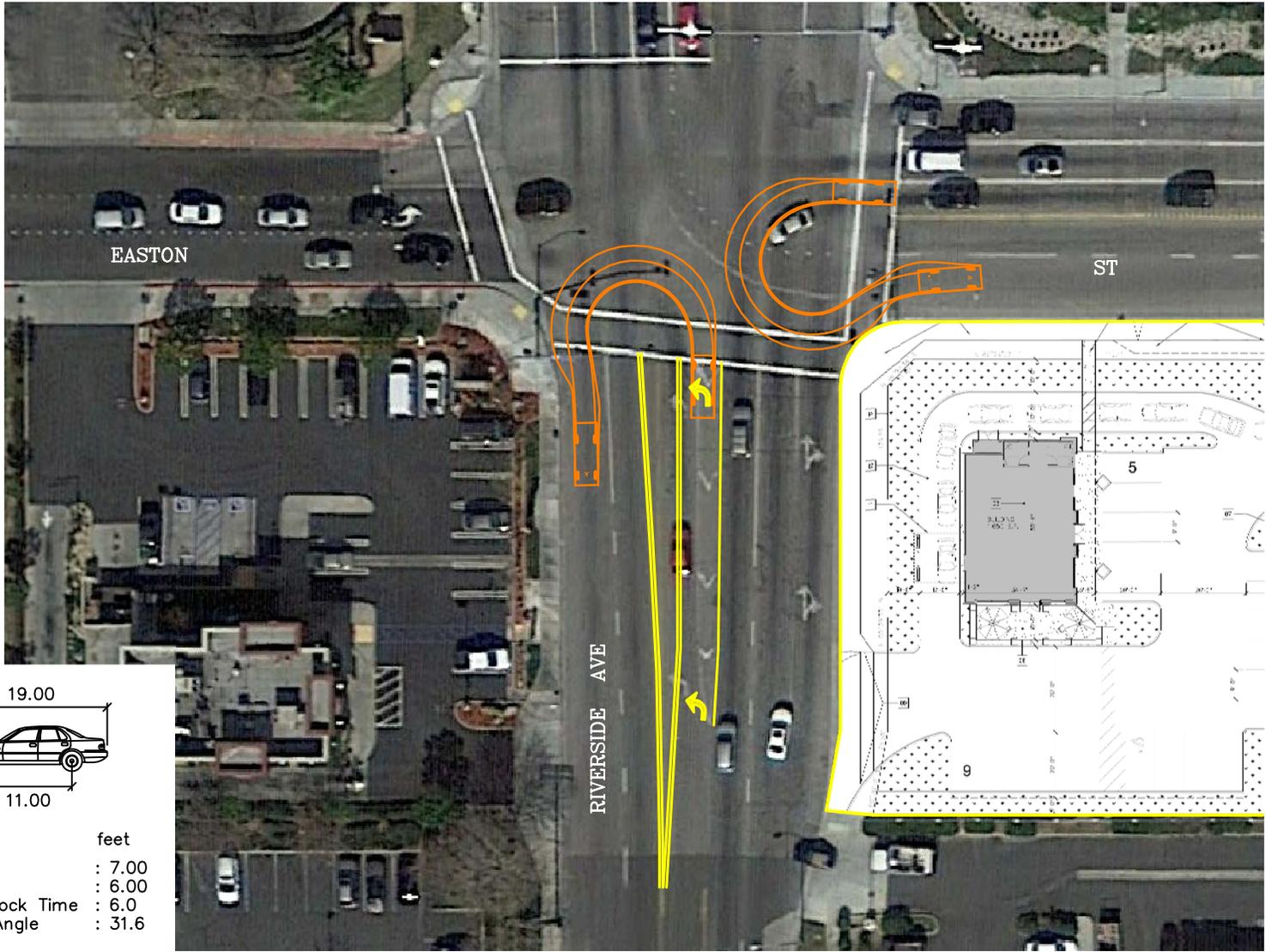
**AM PEAK HOUR PROJECT TRAFFIC VOLUMES**  
THE COFFEE BEAN & TEA LEAF, RIALTO



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**FIGURE 5-3**  
 AM PEAK HOUR AND DAILY  
 PROJECT TRAFFIC VOLUMES  
 THE COFFEE BEAN & TEA LEAF, RIALTO



P	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

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SCALE: 1"=50'

FIGURE 11-2

PLANNED IMPROVEMENTS CONCEPTUAL PLAN  
THE COFFEE BEAN & TEA LEAF, RIALTO

## 12.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- **Project Description** – The project site is a vacant parcel of land located on the southeast corner of Riverside Avenue and Easton Street in the City of Rialto, California. The Project consists of the development of a 1,650 square foot (SF) Coffee Bean & Tea Leaf (Coffee Shop with Drive-Through). The proposed Project is expected to be completed and fully occupied by the Year 2018.

Access to the proposed Project will be provided via one right-in/right-out only driveway located along Riverside Avenue, and one right-in/right-out only driveway located along Easton Street.

- **Study Scope** – The following four (4) key study intersections and two (2) key roadway segments selected for evaluation were determined based on the approved Traffic Scoping Agreement and discussions with City of Rialto staff.

### Key Study Intersections

1. Riverside Avenue at SR-210 Westbound Ramps
2. Riverside Avenue at SR-210 Eastbound Ramps
3. Riverside Avenue at Easton Street
4. Easton Street at Highland Avenue

### Key Roadway Segments

- A. Riverside Avenue, north of Easton Street
- B. Riverside Avenue, south of Easton Street

Detailed daily and peak hour level of service analyses were prepared for Existing Traffic Conditions, Existing With Project Traffic Conditions, Year 2018 Without Project Traffic Conditions, and Year 2018 With Project Traffic Conditions at these locations.

- **Existing Traffic Conditions** – One (1) of the four key study intersections currently operates at an unacceptable level of service during the PM peak hour. One (1) of the key study roadway segments is forecast to operate at an unacceptable level of service for the Existing traffic conditions.
- **Project Trip Generation** – The proposed Project (without pass-by reductions) is expected to generate 1,351 daily trips (one half arriving, one half departing), with 166 trips (85 inbound, 81 outbound) produced in the AM peak hour and 71 trips (36 inbound, 35 outbound) produced in the PM peak hour on a “typical” weekday.
- **Cumulative Projects Traffic Characteristics** – The six (6) cumulative projects are forecast to generate a combined total of 45,337 daily trips, with 1,808 trips (1,303 inbound and 505 outbound) forecast during the AM peak hour and 3,276 trips (1,332 inbound and 1,944 outbound) forecast during the PM peak hour.
- **Existing With Project Traffic Conditions** – For the Existing With Project traffic conditions, one (1) of the key study intersections is forecast to continue to operate at unacceptable levels of

service when compared to the LOS standards defined in this report. However, the implementation of recommended mitigation measures at the impacted intersections mitigates the impacts of the proposed Project. After implementation of the recommended mitigation measures, the impacted intersection is forecast to operate at an acceptable LOS based on the LOS standards outlined in this report. Both of the key study roadway segments are forecast to continue to operate at an acceptable level of service.

- ***Year 2018 With Project Traffic Conditions*** – The proposed Project will cumulatively impact one (1) of the key study intersections based on the LOS criteria defined in this report for Year 2018 With Project traffic conditions. However, the implementation of recommended mitigation measures at the impacted intersection mitigates the impacts of the proposed Project. After implementation of the recommended mitigation measures, the impacted intersection is forecast to operate at an acceptable LOS based on the LOS standards outlined in this report. Both of the key study roadway segments are forecast to continue to operate at an acceptable level of service.
- ***Site Access and Internal Circulation Evaluation*** – Site access and internal circulation for the Project is generally adequate. The two proposed project driveways are forecast to operate at acceptable LOS C or better during the AM and PM peak hours for near-term (Year 2018) traffic conditions. Curb return radii have been confirmed and are generally adequate for small service/delivery (FedEx, UPS) trucks and trash trucks. Additionally, queuing analysis at the Project driveways indicate that Project access is sufficient.
- ***Project Specific Improvements*** – The following improvements listed below will be constructed by the proposed Project:
  - Eliminate the current “No U-turn” restriction to allow U-turns in the northbound and westbound directions at the intersection of Riverside Avenue at Easton Street.

The estimated cost for installation of the new traffic signal equipment associated with the right-turn overlap phasing is approximately \$7,000 each, or \$14,000 total.

- ***Existing With Project Recommended Improvements*** – The results of the “Existing With Project” intersection capacity analysis and roadway segment analysis indicate that the Project will impact one (1) of the four key study intersections. As such, the following improvements listed below have been identified to mitigate the Existing With Project impacts at the key study intersection of Riverside Avenue/Easton Street. The proposed Project can be expected to contribute a fair-share to implement the following recommended improvements:
  - Riverside Avenue at Easton Street: Widen and/or restripe Riverside Avenue to provide an exclusive northbound right-turn lane. Modify the existing traffic signal to include a southbound right-turn overlap and a westbound right-turn overlap.
- ***Year 2018 With Project Recommended Improvements*** – The results of the “Year 2018 With Project” intersection capacity analysis and roadway segment analysis indicate that the proposed Project will cumulatively impact one (1) of the four key study intersections. As such, the following improvements listed below have been identified to mitigate the Year 2018 With Project impacts at the key study intersection of Riverside Avenue/Easton Street. The proposed

Project can be expected to contribute a fair-share to implement the following recommended improvements:

- Riverside Avenue at Easton Street: Widen and/or restripe Riverside Avenue to provide an exclusive northbound right-turn lane. Modify the existing traffic signal to include a southbound right-turn overlap and a westbound right-turn overlap.
- ***Project-Related Fair Share Contribution*** – The Project’s fair-share contribution to offset the Year 2018 With Project traffic at the cumulatively impacted intersection of Riverside Avenue/Easton Street totals **\$2,072.00**.