



City of Rialto

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For Transportation Commission Meeting [October 6, 2021]

TO: Honorable Chairperson and Commission

APPROVAL: Michael Tahan, Interim Public works Director

FROM: Justin Schlaefli, Consultant Engineer, TKE Engineering

Traffic Impact Analysis - Rialto Travel Center Southwest Corner of Casmalia Street at Alder Avenue.

(ACTION ITEM)

BACKGROUND:

The project will involve the construction of a gas station with 16 fueling positions and associated convenience store, a 2,400 square-foot fast food restaurant with a drive-through, 6,375 square foot shop building, and a truck stop with 9 fueling positions on the currently vacant site. The project would also consist of a parking lot with 103 vehicle parking stalls and 91 truck parking stalls. The site is located within the Renaissance Specific Plan, which is located generally between Casmalia Street on the north, Baseline Road on the south, Ayala Drive on the east, and Tamarind and Palmetto Avenues on the west. The Renaissance Specific Plan (Specific Plan) area covers 1,445 acres, with 81 separate Planning Areas, and is approved for a variety of land uses, including residential, commercial, industrial, and employment uses. The Specific Plan was approved for build-out in three (3) separate phases, over a 20-year period. An amendment to the Specific Plan was approved in December 2016.

The project site is located within Planning Area 1 (PA 1) of the Renaissance Specific Plan Amendment. The existing land use designation is Freeway Incubator for PA 1. The proposed gas stations with convenience store and fast-food restaurant are permitted uses under the Freeway Incubator designation since it permits for large regional retail and business uses. Vehicular access provisions for the project site would consist of the following:

- Three (3) full-movement driveways on Sierra Lakes Parkway for the truck parking stalls and truck fueling positions.
- One (1) exit only driveway on Sierra Lakes Parkway for the truck fueling positions.
- One (1) driveway on Sierra Lakes Parkway for the vehicle fueling positions, convenience store, and fast-food restaurant.

The proposed opening year for the project is Year 2022. The project will be developed in a single project phase. The project site is located within 1 mile from the City of Rialto's border with the City of Fontana.

The first Traffic Impact Analysis (TIA) was submitted in July 2021 and was reviewed with review comments prepared. In September 2021 a revised second TIA was submitted and subsequently reviewed.

Consistent with City of Rialto TIA guidelines, study intersections were identified to include freeway interchanges within two (2) miles that were designated to take more than 40% of total traffic from the project and intersections which project contributed 50 or more peak hour trips. This included the locations listed below:

Existing Intersections:

1. Alder Avenue at Sierra Lakes Parkway/Casmalia Street
2. Alder Avenue at SR-210 Westbound Ramps
3. Alder Avenue at SR-210 Eastbound Ramps
4. Alder Avenue at Renaissance Parkway

Future Driveway Intersections:

1. Sierra Lakes Parkway at Driveway #1 (Truck Stop)
2. Sierra Lakes Parkway at Driveway #2 (Truck Stop)
3. Sierra Lakes Parkway at Driveway #3 (Truck Stop)
4. Sierra Lakes Parkway at Driveway #4 (Truck Stop)
5. Sierra Lakes Parkway at Driveway #5 (Gas Station)

In addition, the following roadway segments were analyzed:

- Alder Avenue from Sierra Lakes Parkway to SR-210 EB Ramps
- Alder Avenue from SR-210 EB Ramps to SR-210 WB Ramps
- Alder Avenue from SR-210 WB Ramps to Renaissance Parkway

This site appears to comply with zoning on the property.

The **site location** is shown on **Page 2 of the TIA**, which is included as **Attachment 1**, while the **site plan** is shown on **Page 4 of the TIA**, which is included as **Attachment 2**.

Truck Turn Templates are on **Appendix H of the TIA** which is included as **Attachment 3**

As shown on the figure, driveway widths will vary between 41 and 70 feet wide.

Trip generation estimates for the project are based on daily and peak hourly trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).

ITE trip generation estimates for the project are based on the trip generation rates for the following ITE Land Uses: ITE Land Use 934 - Fast-Food Restaurant with Drive-Through Window; ITE Land Use 960 - Gas Station with Convenience Market; and ITE Land Use 950 - Truck Stop. It is assumed that trips generated by the fast-food restaurant and the gas station with convenience market are all passenger vehicle trips while trips generated by the truck stop are all truck trips. It should be noted that a daily trip generation rate for ITE Land Use 950 (Truck Stop) is not available. Therefore, sales data provided by the applicant for similar truck stop facilities, such as gallons of fuel sold on a monthly and daily basis and the average gallons of fuel filled for each truck, were used to determine an approximate number of trucks to visit the truck stop each day and to determine a custom daily rate for the project.

Due to the nature of the project as a retail use with multiple services onsite, internal trips were estimated as well as pass-by trip reductions consistent with City of Rialto procedures.

Trips are shown on **Page 21, Table 3 of the TIA**, which is included as **Attachment 4**. Project daily trips from this development are estimated at 5,532 passenger car equivalent (PCE) trips with the AM/PM peak hour being 553/515 trips.

Study intersection historical counts were collected in 2017 & early 2020 due to the ongoing COVID-19 pandemic. The data was collectively normalized to include recent area studies.

Consistent with the Renaissance Specific Plan findings, the TIA identified four (4) intersections which the Project contributes to cumulative impacts:

<p style="text-align: center;">TABLE 9 SUMMARY OF INTERSECTION OPERATION OPENING YEAR 2022 CUMULATIVE WITHOUT PROJECT</p>						
Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Alder Avenue at Sierra Lakes Parkway/Casmalia Street	S	86.1	F	68.2	E
2	Alder Avenue at SR-210 WB Ramps	S	90.0	F	113.9	F
3	Alder Avenue at SR-210 EB Ramps	S	98.2	F	73.7	E
4	Alder Avenue at Renaissance Parkway	S	81.5	F	88.1	F

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service or significant impact to intersection per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
- Delay values are based on the methodology outlined in the Highway Capacity Manual, (6th Edition).

S = Signalized
 U = Unsignalized

In addition, one (1) intersection, Alder Avenue at Casmalia Street was found to be impacted in the Opening Year, Existing plus Growth (direct) condition.

ANALYSIS/DISCUSSION:

The TIA included cumulative impacts when added to other proposed projects in the area at four (4) intersections. The four (4) intersection impacts are considered significant based on City policy. These four (4) intersections are being improved as part of the ongoing Alder Avenue/210 Interchange project. It is expected that the Interchange project, Phase 1, will be constructed in 2022 and open to traffic in 2023 shortly after the project opening day.

It is proposed that the project be conditioned to construct improvements at the intersection of Alder Avenue at Sierra Lakes Parkway/Casmalia Street including an eastbound to southbound right turn lane through widening of Casmalia Street subject to the satisfaction of the City Engineer. The feasibility of this improvement is still being explored due to the potential utility conflicts with an overhead power line. Therefore, should the improvement be determined to be infeasible by the City Engineer, the applicant will complete other improvements as well as pay a fair share towards interchange improvements as recommended in the TIA. In addition to the proposed right turn lane, it is proposed that the project be conditioned to restripe the northbound approach to restripe one (1) of the through lanes to provide a shared through/left turn lane with associated signal modifications and re-timing.

In addition, it is proposed that the applicant provide a fair share contribution to the future Alder Avenue/210 Interchange project consistent with the requirements of the Renaissance Specific Plan. As this project is in the final design/permitting phase, the fair share contribution shown in the report will be revised to reflect the latest studies and cost estimates once complete. The fair share will be calculated following City standard procedures. The amount shown in the TIA is for illustration purposes only and may or may not be the final amount once updated costs and calculations are completed. It is recommended that the project be conditioned to pay these fees.

As discussed above, these impacts require construction of an eastbound right turn lane and restriping of the northbound approach at the intersection of Alder Avenue/Casmalia Street as well as payment of fair share fees and any applicable Development Impact Fee (DIF) payments. Mitigation is shown on **page 51, Table 16** of the report. Table 16 has been labeled as **Attachment 5**.

VEHICLE MILES TRAVELED (VMT):

A VMT screening analysis is summarized in the TIA. As discussed in the TIA, VMT is a function of travel volumes multiplied by distance. Therefore, provision of needed services in a community may be found to reduce VMT as patrons have a shorter distance to travel. As such, OPR and SBCTA VMT Guidelines identify that Project types falling under the screening criteria includes the following:

- K-12 Schools
- Local-serving retail less than 50,000 square feet
- Local parks
- Day care centers
- Local serving gas stations
- Local serving banks
- Local serving hotels (e.g. non-destination hotels)
- Student housing Projects on or adjacent college campuses

- Local-serving assembly uses, Community Institutions
- Local serving community colleges
- Affordable or supportive housing, Assisted living facilities, Senior housing
- Projects generating less than 110 daily vehicle trips

The proposed project is considered a locally serving retail/gas station project falling in these screening criteria. Therefore, the project is expected to have a less than significant transportation impact based on VMT criteria. No mitigation measures are proposed.

Conclusion

This project will be accessed by five (5) driveways on Casmalia Street just west of the intersection with Alder Avenue.

Intersections studied are projected to operate consistent with City of Rialto guidelines with deficiencies noted at four locations as noted in Table 9 of the TIA.

Based on these conclusions, it is recommended that the applicant construct improvements at the intersection of Casmalia Street and Alder Avenue including an eastbound right turn lane through widening and a northbound shared through/left turn lane with associated signal modifications. In addition, it is recommended that the applicant pay fair share fees towards the construction of the Alder Avenue/210 intersection project.

RECOMMENDATIONS:

Staff requests that the Transportation Commission:

- Provide recommendations related to approval.
- Recommend approval of a fair share contribution using the City standard methodologies.
- Recommend construction of an eastbound right turn lane via widening and a northbound through/left turn lane at the intersection of Casmalia Street/Alder Avenue.
- Recommend payment of applicable DIF fees.
- Recommend approval to the Planning Commission.