

CHAPTER 2 CHANGES TO THE DRAFT EIR

INTRODUCTION

This chapter presents minor corrections, additions, and revisions made to the Draft EIR initiated by the Lead Agency (City of Roseville), reviewing agencies, the public, and/or consultants based on their review. New text is indicated in underline and text to be deleted is reflected by ~~strike through~~, unless otherwise noted in the introduction preceding the text change. Text changes are presented in the section and page order in which they appear in the Draft EIR.

It should be noted that the changes represent minor clarifications/amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

Chapter 3, Executive Summary

The following new text is added to Chapter 3, Executive summary, page 3-3 after the third paragraph:

The City purchases wholesale electrical power from both the Western Area Power Administration (WAPA), which is generated by the federal government's Central Valley Project, and from other members of the Northern California Power Agency (NCPA), a joint powers agency, and distributes it through transmission and distribution lines. In addition, approximately 40% of the City's power is generated at the City owned Roseville Energy Park (REP).

The City of Roseville Electric Department (Roseville Electric) provides electrical service to customers within the City limits and is anticipated to be the service provider for the project site.

There are existing 12 kV facilities along East Roseville Parkway and Secret Ravine Parkway that would serve the site.

The electrical demand for the Stone Ridge Specific Plan identified the electrical demand for the 17.6-acre parcel at 45 kilo watt (kW) per acre for a total demand of 762kW. The project is proposing to develop a 3000 amp 277/480 volt three phase panel. This electric service is well within the anticipated service size for this parcel and Roseville Electric has indicated there is adequate capacity to serve the project and there are no constraints to providing a reliable energy source (pers com N. Blomquist).

As set forth on pages 2-23 and 2-24 of the Draft EIR, the project includes numerous energy conservation features including the following:

- **Enhanced Construction Administration of MEP Building Systems** – The project’s team of mechanical and electrical engineers would perform a series of 12 in-depth field inspections during building construction to verify that the project’s energy-related systems are installed and calibrated to perform according to the project’s requirements. The value this provides includes reduced energy use, lower operating costs, and improved occupant comfort within the finished space.
- **Optimization of Energy Performance** – The project’s design team uses computer simulated energy modeling software to help achieve energy performance beyond code-based (Title 24) standards to reduce effects associated with excessive energy use. By using strategies such as high-efficient light fixtures, occupant and daylight sensors to control building lighting, high-efficiency HVAC units and Energy Recovery units with air-to-air heat exchangers, energy performance is typically improved by over 15% compared to baseline standards.
- **Energy Performance Verification** – Continue oversight/review of building mechanical and electrical systems to ensure they are operating efficiently and using as little energy as possible. The control systems are routinely inspected and verified that the equipment is sequencing properly and the sensors throughout the system have been calibrated properly.

While development of the proposed project would result in increased demand for electricity, the impact is not considered significant. Buildout of the site was contemplated for commercial uses. Therefore, the project would result in a less than significant impact on energy and is not further addressed.

Section 4.3, Air Quality

Mitigation Measure 4.2-5(a) on page 4.2-26 of the Draft EIR is hereby revised as follows:

- 4.2-5(a)** Prior to ~~final map approval~~ project occupancy, the project applicant shall provide calculations to the City Engineer showing that the project would accomplish the following:
- Exceed the 2010 Title 24 requirements by 10%.
 - Apply a water conservation strategy that would result in a 44.19% reduction in total water usage.

Mitigation Measure 4.2-5(b) on page 4.2-27 of the Draft EIR is removed as follows and Mitigation Measure 4.2-5(c) is renumbered to 4.2-5(b):

~~4.2-5(b) — During project operations, the project operator shall ensure that only low volatile organic compound cleaning products are used on site, subject to inspection by the City.~~

Section 4.4, Climate Change

The following information is added to page 4.4-15 of the Draft EIR to complete the sentence.

Short-Term GHG Emissions

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in Table 4.4-2.

The text on page 4.4-18 is revised as follows:

Implementation of Mitigation Measures 4.2-5(a) and 4.2-5(b), identified in Section 4.2, Air Quality, would result in a reduction of GHG emissions by year 2020, including construction-related GHG emissions, from ~~4,793.51~~ 5,670.59 MTCO_{2e} to ~~4,600.12~~ 4,556.58 MTCO_{2e}, which would result in an overall reduction from projected 2020 BAU levels of ~~18.30~~ 19.65% by 2020. In addition, the reduction of operational reactive organic gases (ROG) and NO_x emissions due to payment of off-site mitigation fees, per Mitigation Measure 4.2-5(e b) (see Section 4.2, Air Quality), would subsequently result in an associated reduction in GHG emissions. The cumulative mitigation fee amount stated below is the fee required to reduce the project’s contribution to cumulative emissions to less than significant. With implementation of Mitigation Measures 4.2-5 (a) and (b) ~~through (e)~~, the total GHG reduction from projected 2020 BAU levels by 2020 would be ~~21.58~~ 21.5813%, as presented in Table 4.4-6, which exceeds the threshold employed by the City of a 21% minimum GHG emission reduction compared to BAU levels. Accordingly, after mitigation, the impact would be **less than significant**.

In addition, Table 4.4-6 on page 4.418 is hereby revised as follows:

Reductions	% Reduction
Reduction from Project 2020 BAU by 2020	16.515.47
Compliance with CalGreen Code	1.8N/A
Additional reduction from implementation of Mitigation Measures 4.2-5(a) and (b)	1.84.18
Additional reduction from implementation of Mitigation Measure 4.2-5(eb)	1.48
Total % Reduction	21.5813

Section 4.12, Transportation and Circulation

The following new text is added to the Draft EIR to the bottom of page 4.12-28 for further clarification:

The City's CIP has approximately 400 roadway, intersection and signal projects valued at approximately \$381 million. To date, the City has collected approximately \$150 million in Traffic Mitigation fees and secured another \$50 million in grants, outside funding such as federal and state programs and developer-constructed roadway projects for a total of nearly \$200 million in projects constructed to date. The City's CIP is programmed to collect approximately an additional \$181 million from future development and is, therefore, fully funded.

The following information is added to page 4.12-64 of the Draft EIR after Table 4.12-17:

The following describes the effect of each of the proposed mitigation measures identified for Impact 4.12-1.

1. Extend the amount of vehicle storage in the eastbound left-turn lanes by approximately 100 feet.

Effect: enables storage for four more vehicles, thereby reducing likelihood/frequency of eastbound left-turn vehicles blocking through traffic. The net effect is a reduction in delay on the eastbound approach.

2. Install an overlap phase on the southbound right-turn movement from Secret Ravine Parkway onto East Roseville Parkway.

Effect: increases the capacity of the southbound right-turn movement by implementing a green overlap arrow (i.e., this movement operates simultaneously with the eastbound left-turn). This phasing modification necessitates that u-turns from the eastbound left-turn lane be prohibited. This prohibition would remove 58 PM peak hour vehicles from the left-turn movement. Since this movement is critical to intersection operations, the removal of these vehicles would benefit overall operating conditions. The net effect is an increase in capacity for the southbound right-turn and a decrease in travel demand in the eastbound left-turn lane, both of which would reduce delays.

3. Reduce the maximum green split (including yellow, and all-red intervals) for the southbound left-turn movement from Secret Ravine Parkway onto East Roseville Parkway from 22 to 18 seconds, and reallocate this available green time equally to the eastbound left-turn and westbound through movements.

Effect: better allocates green time to match travel demand. Reduces queuing (and delays) in the eastbound left-turn lane by increasing the amount of green time.

4. Retime the traffic signal at the East Roseville Parkway/North Sunrise Avenue intersection to better facilitate westbound traffic signal progression.

Effect: increases the amount of green time for the westbound through movement, which reduces queuing on this approach. The reduction in queuing enables westbound through and southbound right-turn movements to more efficiently depart the East Roseville Parkway/Secret Ravine Parkway intersection (i.e., they are able to accelerate more freely because they do not immediately reach the back of the queue beginning at the North Sunrise Avenue intersection). The net effect is a reduction in delay for the westbound through and southbound right-turn movements.

The combined effectiveness of these mitigations was analyzed using the SimTraffic microsimulation model. This state of the practice analysis tool considers traffic volumes, turn lane storage, signal timings/phasings, queue spillbacks, and other conditions when analyzing travel conditions in a corridor.

The following information is added to the end of page 4.12-64 under a new heading, Project Considerations.

Project Considerations

The following documents the detailed analysis of project access, including driveway throat depths, the need for right turn deceleration lanes at driveways, and sight distance considerations.

This section describes project access including driveway throat depths, need for deceleration lanes, and sight distance considerations.

Driveway Throat Depths

As described previously, the project would consist of two right-turn only driveways and one full-access driveway. The required throat depth at each driveway is analyzed in Table 4.12-18 (refer to Appendix D for technical calculations). It is important the site be designed to provide an adequate throat depth for outbound vehicular traffic. Without this, queuing within the site could cause inbound traffic to spillback onto the public street, thereby adversely affecting its operation. The analysis of Driveway 2 on Secret Ravine Parkway considered an opposing driveway (currently under construction) that will accommodate access to 80 assisted living units. Driveway 2 is approximately 48 feet

wide, which is sufficient to stripe dedicated left- and right-turn lanes on the outbound approach. As shown, the maximum expected queue length for all driveways can be accommodated by the available storage. Therefore, no queuing problems are anticipated during typical weekday conditions.

**Table 4.12-18
Throat Depth Requirements at Project Driveways**

Driveway	Movement	Maximum Queue 1	Available Storage 2
Driveway 1 on Secret Ravine Parkway	Outbound Right-Turn	50 ft.	50 ft.
Driveway 2 on Secret Ravine Parkway	Outbound Left-Turn	100 ft.	275 ft.
	Outbound Right-Turn	50 ft.	275 ft.
Driveway 3 on East Roseville Parkway	Outbound Right-Turn	125 ft.	165 ft.

Notes:

- 1 Maximum queue length based on Estimation of Maximum Queue Lengths at Unsignalized Intersections (ITE Journal, 2001). Occurs during PM peak hour.
- 2 Available storage estimated based on project site plan.

Source: Fehr & Peers 2013

Right-Turn Deceleration Lanes

City of Roseville standards require construction of a right-turn deceleration lane into private driveways located on arterial streets when the right-turn ingress volume is expected to exceed 50 vehicles per hour. When the right-turn volume is expected to range from 10 to 50 vehicles per hour, a right-turn deceleration taper is required.

According to the project site plan, the project would construct an auxiliary lane along the project frontage on Secret Ravine Parkway beginning just east of East Roseville Parkway to Driveway 2. The auxiliary lane will provide right-turn deceleration opportunities at both driveways as well as a turnout for buses. This configuration was necessary to accommodate project trips and a future bus stop. The resulting configuration is consistent with City standards.

As shown on Figure 7b (in Appendix E), Driveway 3 on East Roseville Parkway is projected to serve 53 AM peak hour and 79 PM peak hour right-turning vehicles. Since Driveway 3 is located on an arterial and would serve in excess of 50 vehicles per hour, a right-turn deceleration lane is required according to City standards.

Major Street Left-Turn Lane Storage and Sight Distance

A 200-foot southbound left-turn ingress lane is currently constructed at Driveway 2 on Secret Ravine Parkway. This turn lane is expected to have a maximum vehicle queue of 6

vehicles, or 150 feet (see Appendix D for technical calculations). Therefore, adequate storage is provided in this turn lane.

A left-turn ingress lane is currently constructed and closed to public use at Driveway 3 on East Roseville Parkway. Detailed analyses of sight distance for this left-turn lane were conducted as part of earlier studies for this project. In 2010, City of Roseville Engineering Department staff completed an engineering speed survey of East Roseville Parkway. The 85th percentile speed (i.e., the speed at which 85% of traffic is traveling at or below) of motorists on the segment between Secret Ravine Parkway and Stone Canyon Drive was observed to be 51 mph. Based on these measurements and standard engineering practice, City of Roseville staff recommended that a 55 mph design speed be used for the sight distance evaluation. The segment of East Roseville Parkway features both horizontal and vertical curvature, and superelevation. In addition, the presence of shrubs, tree, and a berm within the landscaped median east of the left-turn lane also posed sight distance constraints. Detailed calculations determined that a motorist in the left-turn lane would not have adequate sight distance even if the landscaped median was replaced by paving stones or an equivalent material. This sight distance evaluation was complemented by a LIDAR survey performed by City of Roseville staff in November 2012 to field-confirm the available sight distance. Therefore, it was concluded that the left-turn ingress lane would not function acceptably in its current location.

The concept of relocating Driveway 3 (along with the left-turn lane) further east by about 200 feet was considered. Although this redesign was found to achieve adequate sight distance, adverse effects on site design were noted and it was ultimately decided jointly by the applicant and City of Roseville to maintain Driveway 3 in its current location and to not provide left-turn ingress. Thus, if the project site is developed, as a condition of approval, the existing left-turn ingress lane in the median of East Roseville Parkway at Driveway 3 shall be permanently closed, by barriers or otherwise replaced with landscaping or paving stones.

Figure 4.12-12 shows the evaluation of sight distance for the outbound right-turn movement at Driveway 3. As indicated, a motorist turning right from the project driveway would have adequate sight distance of oncoming traffic traveling eastbound on East Roseville Parkway.

Internal Circulation

The review of internal circulation focused on the following two key internal intersections:

- Driveway 1/Driveway 2 Intersection – This intersection is located about 50 feet from Driveway 1’s terminus at Secret Ravine Parkway. To minimize the potential

for inbound traffic at this driveway to queue back onto Secret Ravine Parkway, the following will be included as conditions of approval:

- Stop signs shall be posted on the southbound Driveway 2 and opposing parking aisle approaches, and operate the eastbound/westbound Driveway 1 approaches as uncontrolled.
- Driveway 1/Driveway 3 Intersection – This intersection is situated midway between the Driveway 3 terminus at East Roseville Parkway and the building entrance. To accommodate expected vehicular and pedestrian travel, the following shall be conditions of approval of the project:
 - Post stop signs on all approaches.
 - Stripe crosswalks on the east and west legs (i.e., in the direction of pedestrian travel to/from the building entrance).

These recommendations are illustrated on Figure 4.12-13.

The following summarizes the results of that analysis:

- The available storage for outbound movements at the three project driveways would accommodate the maximum expected vehicle queue.
- A right turn deceleration lane is warranted and shall be included at the project driveway on East Roseville Parkway.
- The currently constructed left turn ingress lane on East Roseville Parkway shall be closed to public use due to insufficient sight distance.
- Adequate sight distance is provided for outbound right turns from the East Roseville Parkway driveway.

The second item in this list is reflected in the proposed conditions of approval for the project.

The following correction is made to Mitigation Measure 4.12-1 on page 4.12-63:

- 4.12-1(a) Vehicle Storage** The amount of vehicle storage in the eastbound left-turn lanes shall be extended lanes by approximately 100 feet. This can be accomplished by extending the dual left-turn lanes an additional 30 feet using available pavement and modifying the 120-foot transition taper to a 90-foot taper. This configuration would not affect storage for the adjacent westbound left-turn lane into the Palisades Shopping Center.

The following information is added to page 4.12-64 under the heading, Project Considerations:

Project Construction

Construction of the proposed project would generate a variety of truck and employee trips. Since the magnitude of these trips during peak hours would be less than that of the proposed project, absolute impacts (in terms of delay and queuing) when compared to project operations would not be significant. However, construction staging and lane closures could cause adverse effects if not carefully planned.

Accordingly, as conditions of approval, the project shall develop a Construction Traffic Management Plan to the satisfaction of the City's Engineering Department. The plan would include items such as: the number and size of trucks per day, expected arrival/departure times, truck circulation patterns, location of truck staging areas, employee parking, and the proposed use of traffic control/partial street closures on public streets. The overall goal of the Construction Traffic Management Plan would be to minimize traffic impacts to public streets and maintain a high level of safety for all roadway users.

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Figure 4.12-12 Right-Turn Sight Distance

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Figure 4.12-13 Updated Recommendations

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