TRAFFIC IMPACT ANALYSIS

ROCKLIN COMMONS

ROCKLIN, CALIFORNIA



January 2009

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Submitted to:

City of Rocklin 3970 Rocklin Road Rocklin, California 95677

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LSA Project No. DSR534



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INTRODUCTION

This report presents the results of an analysis by LSA Associates, Inc. (LSA) of the traffic impacts associated with the proposed Rocklin Commons project in the City of Rocklin (City), California. The project proposes the construction of a maximum 415,000 square-foot (sf) commercial/retail center on a 40.86± acre (ac) site at the northwest corner of Interstate 80 (I-80) and Sierra College Boulevard. The proposed regional shopping center will include a variety of retail including major tenants, smaller retail stores, and restaurants.

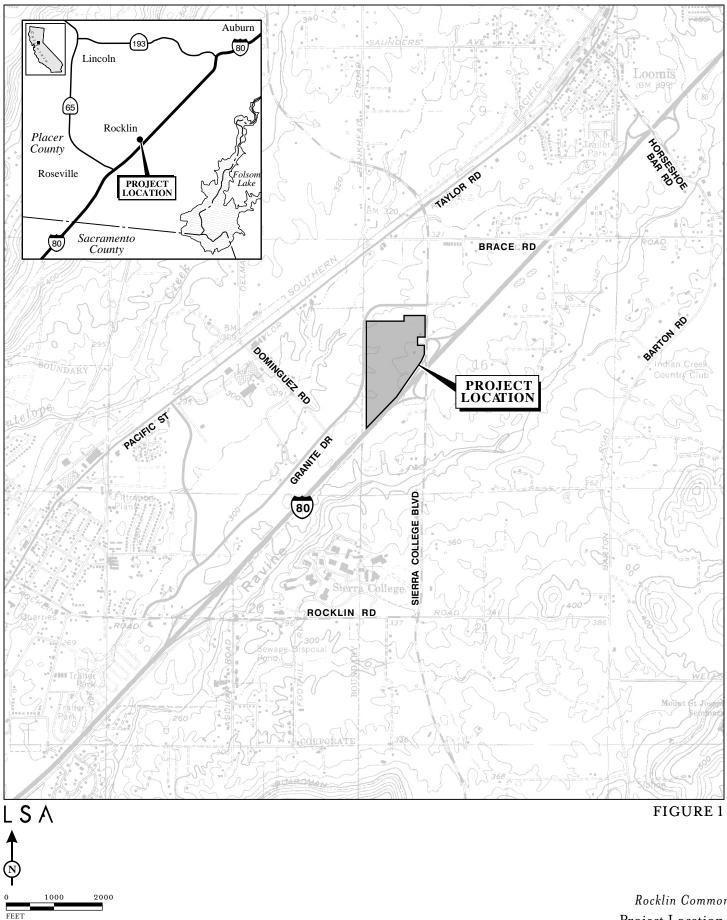
This analysis examines the traffic impacts expected to result from the addition of vehicle traffic generated by the proposed project on the existing, existing plus approved projects, and cumulative (year 2025) traffic condition at surrounding intersections and roadway segments. "Approved projects," in this context, are land use and infrastructure projects that have received all discretionary approvals requiring environmental review. Traffic volumes and levels of service (LOS) for year 2025 conditions were determined using the City of Rocklin Traffic Model. Potential mitigation measures for facilities significantly impacted by the project are identified in this study.

This analysis has been prepared in consultation with City staff and is consistent with the objectives and methodologies set forth in the City's General Plan Transportation Element and applicable provisions of the California Environmental Quality Act (CEQA). This analysis also recommends mitigation measures based on the project's effects under the existing plus approved projects and cumulative (2025) scenarios.

PROJECT DESCRIPTION

The proposed project is a regional shopping center (presently expected to include 17 buildings and approximately 1,828 parking stalls. The proposed project will be built on a 40.86± ac site at the northwest corner of I-80 and Sierra College Boulevard. The location of the proposed project is shown in Figure 1. The site is currently undeveloped. Up to 415,000 sf of retail/commercial structures will be constructed. The proposed major tenant would consist of 148,370 sf of main building area with a 10,800 sf garden center. The remaining 255,830 sf would be made up of smaller retail and restaurant-type uses and may include up to 60,000 sf of grocery sales. Some tenants may require drive-thrus, outside storage, outside display, outdoor vendor sales, and/or outside seasonal sales. The project site plan is shown in Figure 2.

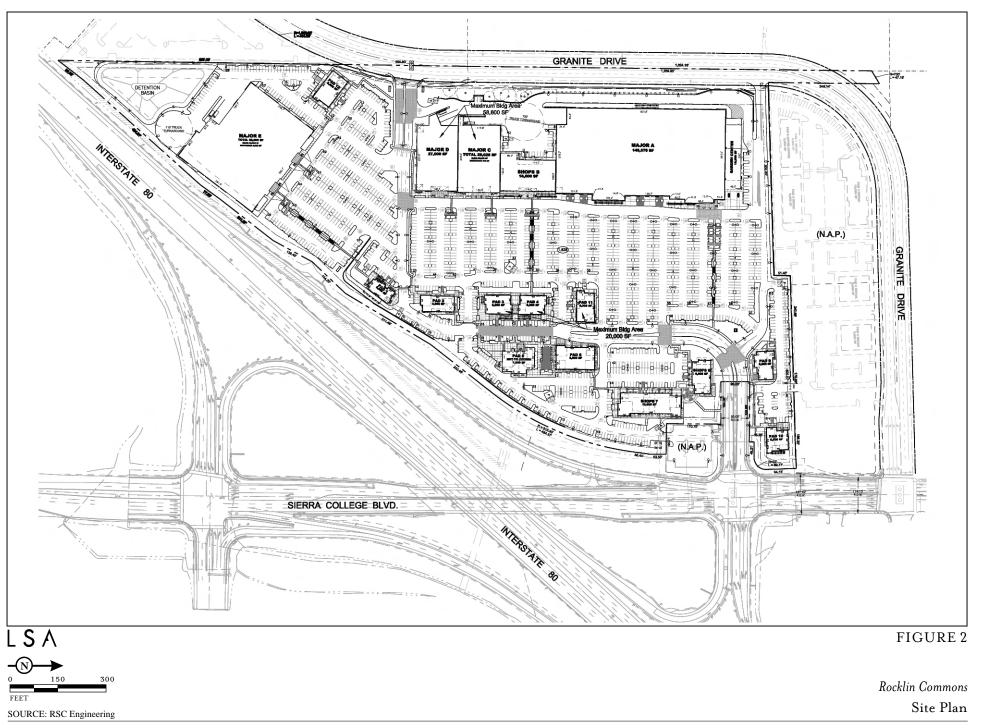
Although the Sierra College Boulevard/I-80 interchange reconstruction project is not part of the proposed project description, this project will significantly affect access to Rocklin Commons. The Sierra College Boulevard/I-80 interchange project will widen the bridge over I-80, reconstruct the on- and off-ramps, and include full widening of Sierra College Boulevard across the northerly portion of the frontage of the Rocklin Commons project. The main access into Rocklin Commons will be constructed as part of the Sierra College Boulevard overcrossing project and dedicated as a City right-of-way. As a project design feature, the eastbound right-turn lane of the Sierra College Boulevard/I-80 westbound ramps intersection will be constructed with an overlap signal phase. The Sierra College Boulevard/I-80 interchange reconstruction project is underway and will be completed prior to the opening of Rocklin Commons.



SOURCE: USGS 7.5' Quad - Rocklin, Ca.

Rocklin Commons Project Location

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I:\DSR534\G\Site Plan.cdr (7/29/08)

Access to the proposed Rocklin Commons project will be provided via three driveways; one full-access driveway from Sierra College Boulevard at the interchange with I-80 westbound, a second full-access driveway from Granite Drive, and a right-in/right-out access from Granite Drive.

METHODOLOGY

The traffic impact analysis is based on intersection levels of service for the following scenarios:

- Existing
- Existing Plus Project
- Existing Plus Approved Projects (Baseline)
- Existing Plus Approved Projects (Baseline) Plus Project
- Year 2025
- Year 2025 Plus Project

Intersection LOS Methodology. *Traffix* computer software was utilized to determine the LOS at signalized study area intersections based on the Circular 212 "Critical Movement Analysis" (CMA) planning methodology. Highway Capacity Manual (HCM) 2000 Methodology was utilized to determine the LOS at unsignalized study area intersections and freeway interchange intersections. This methodology is used by California Department of Transportation (Caltrans) for analyzing the intersections it controls and is approved by the City.

The CMA methodology compares the amount of traffic an intersection is able to process (capacity) to the level of traffic during peak hours (volume). The resulting volume-to-capacity ratio (v/c) is expressed in terms of LOS, where LOS A represents free-flow activity and LOS F represents overcapacity operation. The CMA methodology provides a planning level assessment of the traffic volume at an intersection and is used by many cities and agencies within California for the purposes of traffic impact analysis. Some of the cities and agencies besides Rocklin that utilize the Circular 212 CMA methodology include West Sacramento, Fairfield, Roseville, Union City, San Carlos, the Contra Costa Transportation Authority, and the City/County Associations of Governments of San Mateo County. In addition, a number of agencies throughout the state utilize the Intersection Capacity Utilization (ICU) methodology, which is similar to the Circular 212 CMA methodology but does not take into account the effects of signal phasing on the LOS. Utilization of a methodology that calculates v/c ratio has proven to be an accurate method of disclosing traffic impacts of development projects.

LOS is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, and signal phasing on roadway and intersection operations. *Traffix* computer software utilizing Circular 212 CMA methodology analyzes each intersection in isolation and does not consider other factors that could affect traffic operations such as intersection spacing and downstream delay. These factors typically have minor effect on traffic capacity at intersection. Where intersections are closely spaced (e.g. freeway ramp intersections) Circular 212 CMA methodology

can, however, calculate a more favorable LOS than is experienced by drivers because intersection spacing is not considered. LOS criteria for signalized intersections are presented below.

LOS Description

- A No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
- B This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
- C This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
- D This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
- E Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is attained, no matter how great the demand.
- F This level describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods due to the congestion. In the extreme case, speed can drop to zero.

Level of Service	Volume to Capacity (CMA Methodology)
А	<u><</u> 0.600
В	0.610-0.700
С	0.710-0.800
D	0.810-0.900
Е	0.910-1.000
F	> 1.000

The relationship between LOS and the v/c ratio for signalized intersections is as follows:

Because the CMA methodology does not provide an accurate representation of the LOS of an unsignalized intersection, the 2000 HCM methodology has been used to determine intersection LOS at unsignalized intersections. For the unsignalized HCM methodology, the LOS is presented in terms of total intersection delay (at four-way stop intersections) and approach delay of the major and minor streets (at two-way stop intersections) in seconds per vehicle. The relationship of delay and LOS at unsignalized intersections is summarized below.

Level of Service	Unsignalized Intersection Delay per Vehicle (sec)	Signalized Intersection Delay per Vehicle (sec)
A	<u><</u> 10.0	<u><</u> 10.0
В	>10.0 and <15.0	>10.0 and <20.0
С	>15.0 and <u><</u> 25.0	>20.0 and <35.0
D	>25.0 and <u><</u> 35.0	>35.0 and <u><</u> 55.0
Е	>35.0 and <u><</u> 50.0	>55.0 and <u><</u> 80.0
F	>50.0	>80.0

The HCM methodology has also been used to determine LOS at the Caltrans controlled signalized I-80 freeway ramp intersections with Rocklin Road, Sierra College Boulevard, and Horseshoe Bar Road. The HCM method is used by Caltrans for intersections it controls. The HCM analysis at the interchange ramp intersections at Sierra College Boulevard/I-80 is also provided for purposes of comparison to the LOS analysis presented in the Caltrans Environmental Document and supporting the focused interchange Traffic Study conducted in January 2003.

Roadway LOS Methodology. Roadway segment analysis in the project area was also conducted as part of this traffic study. To identify the project's impact on the operating condition of a roadway segment, an LOS ranking scale was used. The LOS is based on average daily traffic (ADT) roadway segment threshold capacities, as presented below.

	Roadway Segment Capacities: Two-Way Average Daily Traffic Volumes									
LOS	Four-LaneFour-LaneFour-LaneFour-LaneFour-LaneRestrictedSix-LaneTwo-LaneUndividedDividedAccessDividedSCollectorArterialArterialArterial		Six-Lane Restricted Access Arterial	Four-Lane Freeway						
А	9.000	18,000	20,250	21,600	30,315	30,315	37,600			
В	10,700	21,300	23,625	25,200	36,000	36,000	52,800			
С	12,000	24,000	27,000	28,800	40,500	40,500	68,000			
D	13,500	27,000	30,375	32,400	45,560	45,560	76,000			
Е	15,000	30,000	33,750	36,000	50,525	50,525	80,000			

LOS = level of service

The LOS E capacity shown in the above table represents an approximation of the number of vehicles that the roadway can comfortably carry on a daily basis before it is considered to be at capacity. If the ADT on a roadway segment exceeds the LOS E capacity, then the daily LOS of the roadway is considered to be LOS F. It is important to note that an ADT capacity must assume several critical characteristics of traffic, including the percentage of daily traffic in the peak hour and the directional split within that peak hour. Actual characteristics of a specific roadway segment, the ADT on each segment was divided by the capacity of the segment (the LOS E capacity, as shown in the above table) to determine the daily v/c ratio for each roadway. The v/c ratio was compared to the values in the table below to determine the daily LOS for each roadway segment.

Level of Service	Volume-to-Capacity Ratio
А	<u><</u> 0.600
В	0.610-0.700
С	0.710-0.800
D	0.810-0.900
Е	0.910-1.000
F	> 1.000

The daily LOS, as described above, is a planning-level threshold that is generally used to determine the overall cross-sections of roadways within a circulation network. While it can provide an indication of whether the existing or forecast volume might result in unsatisfactory operation of the roadway, it does not provide an accurate representation of the actual operation of the roadway, especially during the peak hours of the day. For purposes of this project impact analysis, the daily capacity was first examined to determine whether the roadway might exceed its theoretical daily capacity. If the roadway volume exceeded the daily capacity (i.e., v/c greater than 1.00), then the peak-hour v/c ratio was calculated. If the peak-hour capacity is also exceeded, the roadway segment is considered to be operating at an unsatisfactory LOS. Although the roadway segment may seem to be operating with unsatisfactory LOS when the daily volume is examined, it is not considered unsatisfactory LOS if the peak-hour traffic volumes does not exceed the capacity. This is because traffic along a roadway segment will be greatest during the peak commute hours. As a result, if traffic operations are satisfactory LOS during the remaining off-peak hours of the day.

Freeway LOS Methodology. As described in Chapter 13 (Freeway Concepts) of the *HCM*, the freeway was divided into segments for purposes of this analysis. Peak-hour volumes on basic segments were analyzed using the methodology contained in *HCM* Chapter 23 (Basic Freeway Segments), with calculations performed using the Highway Capacity Software Plus (HCS Plus, Version 5.2). Level of service on freeway mainline is determined by the density of vehicles on the segment. The table below shows the LOS criteria for freeway segments.

Level of Service	Density (pc/mi/ln) ¹ for Basic Freeway Segments
А	≤11
В	> 11 and \leq 18
С	> 18 and \leq 26
D	> 26 and \leq 35
Е	>35 and \leq 45
F	> 45

LOS Standard. According to the City General Plan circulation element, the City considers LOS C as the upper limit of satisfactory operations except for intersections (both signalized and unsignalized) and roadway segments located within 0.5 mile (mi) from direct access to an interstate freeway, where

pc/mi/ln = Passenger car per mile per lane.

1

LOS D is considered satisfactory. For intersections within the Town of Loomis, in general, LOS C is the upper limit of satisfactory operations regardless of proximity to an interstate freeway. The proposed project does not meet the criteria listed in the Town of Loomis General Plan for an exception to its LOS C standard. Therefore, all intersections within the Town of Loomis must meet the LOS C standard regardless of their proximity to a freeway access location. Mitigation is required for any intersection or roadway segment where project traffic causes the intersection to deteriorate from satisfactory to unsatisfactory operation. The City does not have an adopted criterion that defines significant impact at an existing deficient intersection or roadway segment; therefore, criteria were developed in coordination with the City to address this potential condition. If an intersection, roadway segment, or freeway link is already operating at unsatisfactory LOS, an increase of 5 percent (addition of 0.05) to the v/c ratio would constitute a significant project impact. An increase of 0.05 in the v/c ratio would be considered a measurable worsening of the intersection or roadway operations and therefore would constitute a significant project impact. If an unsignalized intersection is already operating at unsatisfactory LOS C (LOS D within 0.5 mi of freeway access), then the addition of more than 5 percent of the total traffic at the intersection would be considered a significant project impact. Similarly if a signalized intersection which is analyzed using HCM methodology (ramp intersections) is already operating at unsatisfactory LOS D, then the addition of more than 5 percent on the total traffic at the intersection would be considered a significant project impact. According to the Placer County General Plan (1994), the County considers LOS C as the upper limit of satisfactory operations except for intersections (both signalized and unsignalized) and roadway segments located within 0.5 mi from state highways, where LOS D is considered satisfactory (though the County General Plan allows its Board of Supervisors to allow degradation beyond these levels pursuant to General Plan policy 3.A.7).

The significance criteria used for intersections and roadway segments within the Town of Loomis are consistent with the criteria used in previous traffic studies, including the Rocklin Crossings Traffic Study, which reflected input from Brian Fragiao of the Town of Loomis staff. As directed by the City of Rocklin, LSA has applied the same significance criteria to the Town of Loomis intersections and roadway segments as applied in the City of Rocklin.

Study Area. The study area was developed in consultation with the City, based on recent nearby projects, professional judgment, and input on the Notice of Preparation. Of the 21 study area intersections, 12 are located within 0.5 mi from direct access to an interstate freeway while the remaining 9 intersections are outside of the 0.5 mi criterion. Levels of service will be analyzed at the following study area intersections for the a.m., p.m., and Saturday peak hours for each development scenario. Intersections within 0.5 mi from a freeway access location (where the LOS D standard would apply) are noted with an asterisk (*). As indicated above, all intersections within the Town of Loomis or located in Placer County have an LOS C standard. The jurisdiction of intersections located outside of the City of Rocklin are indicated in parentheses after the intersection name.

- Pacific Street/Rocklin Road
- Granite Drive/Rocklin Road*
- I-80 westbound ramp/Rocklin Road*
- I-80 eastbound ramp/Rocklin Road*

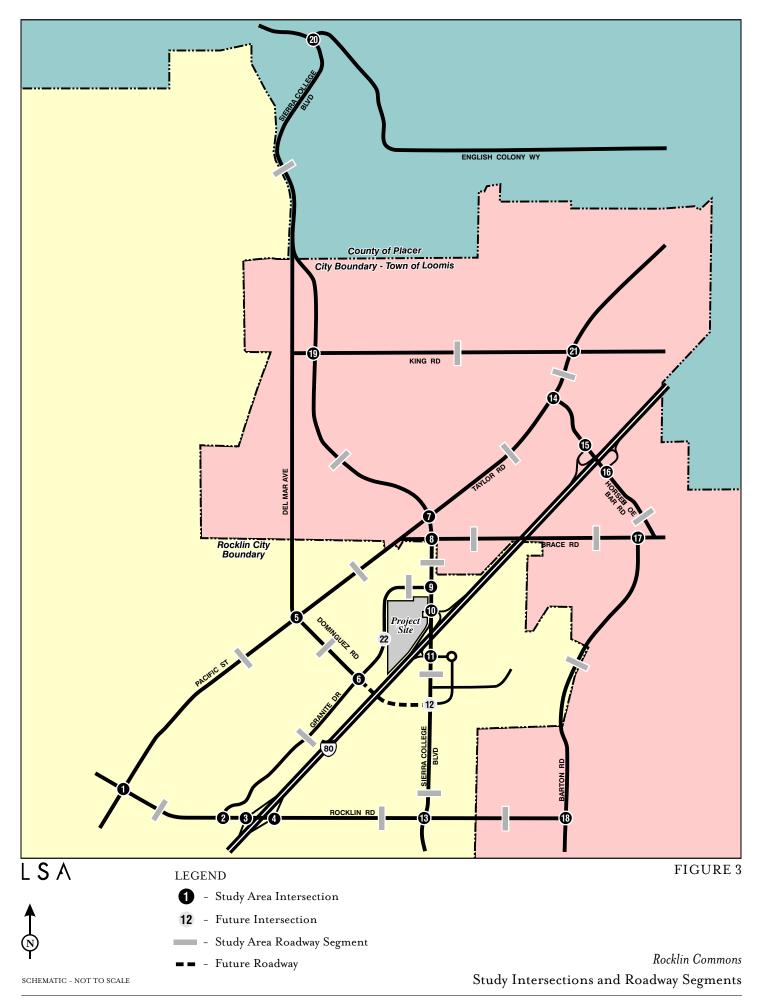
- Dominguez Road (Del Mar Avenue)/Pacific Street
- Granite Drive/Dominguez Road
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Brace Road (Loomis)
- Sierra College Boulevard/Granite Drive*
- Sierra College Boulevard/I-80 Westbound Ramp*
- Sierra College Boulevard/I-80 Eastbound Ramp*
- Sierra College Boulevard/Dominguez Road* (Future Intersection)
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)
- Horseshoe Bar Road/I-80 Westbound Ramp (Loomis)
- Horseshoe Bar Road/I-80 Eastbound Ramp (Loomis)
- Barton Road/Brace Road (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/King Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

The following roadway segments were included in the study area. Roadway segments located within 0.5 mi of direct access to an interstate freeway, where LOS D is considered satisfactory, are noted with an asterisk (*).

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Pacific Street between Sierra College Boulevard and Dominguez Road
- Pacific Street between Dominguez Road and Rocklin Road
- Rocklin Road between Pacific Street and Granite Drive*
- Rocklin Road between I-80 and Sierra College Boulevard*
- Rocklin Road between Sierra College Boulevard and Barton Road (Loomis)
- Barton Road between Rocklin Road and Brace Road (Loomis)
- Horseshoe Bar Road between I-80 and Brace Road (Loomis)
- Brace Road between I-80 and Barton Road (Loomis)
- Brace Road between I-80 and Sierra College Boulevard (Loomis)
- Sierra College Boulevard between English Colony Way and King Road (Placer County)

- Sierra College Boulevard between King Road and Taylor Road (Loomis)
- Sierra College Boulevard between Taylor Road and I-80*
- Sierra College Boulevard between I-80 and Dominguez Road (Future Intersection)*
- Sierra College Boulevard between Dominguez Road (Future Intersection) and Rocklin Road
- Granite Drive between Dominguez Road and Sierra College Boulevard
- Granite Drive between Dominguez Road and Rocklin Road
- Dominguez Road between Taylor Road and Granite Drive
- King Road between Sierra College Boulevard and Taylor Road (Loomis)

Further analysis for a roadway segment forecast to operate beyond the LOS C or D threshold of the daily capacities includes an analysis of the a.m. and p.m. peak-hour directional volumes. The a.m. and p.m. peak-hour v/c ratios were evaluated based on per-lane capacity of 1,650 vehicles per hour. The location of the study intersections and study roadway segments is illustrated in Figure 3.



EXISTING CONDITIONS

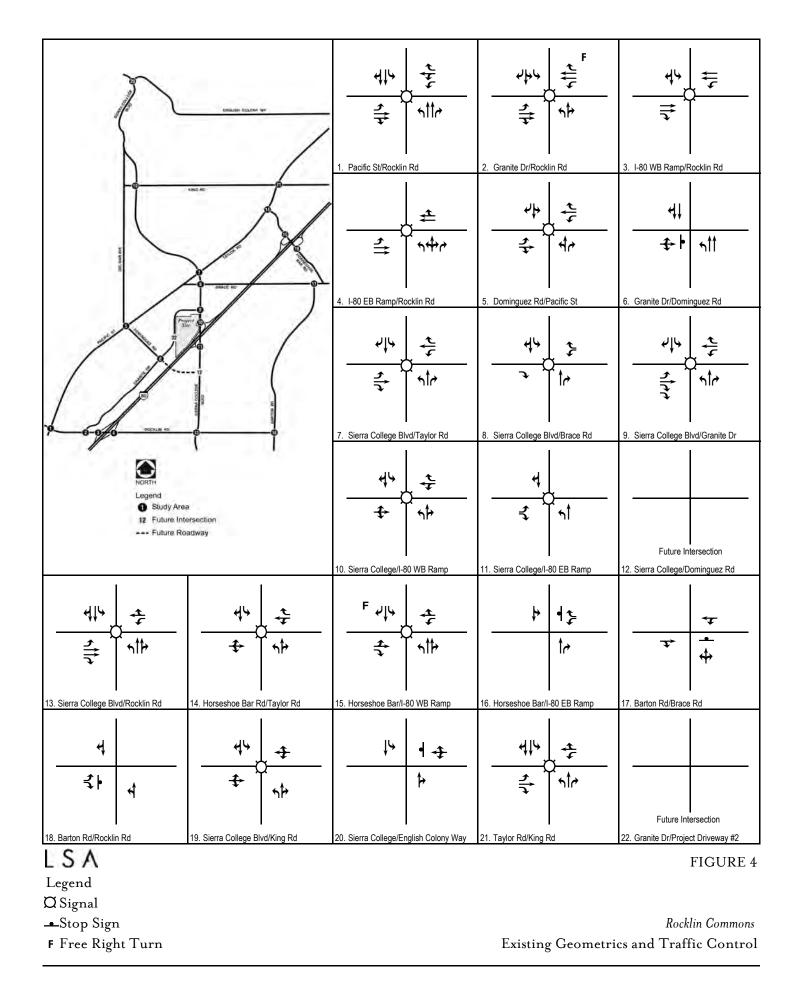
Roadway Network

The existing intersection geometrics and traffic control at study area intersections are illustrated in Figure 4. The roadways that will provide access to the project are described below:

- Sierra College Boulevard. Sierra College Boulevard is a north-south roadway that forms the eastern boundary of the project site. This roadway is classified as an Arterial roadway with an ultimate six-lane cross-section in the City's General Plan Circulation Element. Sierra College Boulevard is designated as a Truck Route by the City. Within the study area, Sierra College Boulevard is a two-lane roadway north of Rocklin Road and a four-lane roadway immediately south of Rocklin Road. Based on the Town of Loomis General Plan, Sierra College Boulevard is proposed to have an ultimate cross-section of six lanes between I-80 and Bankhead Road and a four-lane cross-section north of Bankhead Road. Primary access to the project will be provided via one location on Sierra College Boulevard.
- **Granite Drive.** Granite Drive is a four-lane southwest-northeast roadway located west of I-80. Granite Drive is classified as an Arterial in the City General Plan Circulation Element. Granite Drive runs from Rocklin Road in the south and terminates at Sierra College Boulevard just north of the project site. Granite Drive is classified as a Truck Route from Dominguez Road to Sierra College Boulevard. Secondary access to the project will be provided via two locations on Granite Drive.

Other roads in the vicinity of the project are described below:

- Interstate 80 (I-80). I-80 is an interstate highway providing interregional access in the vicinity of the project. Throughout the study area, I-80 generally travels in a southwest to northeast direction. Interchanges along I-80 near the project site are provided at Rocklin Road, Sierra College Boulevard, and Horseshoe Bar Road. Direct access to the project site will be provided from the I-80 westbound ramps at Sierra College Boulevard.
- State Route 65 (SR-65). SR-65 provides regional access in the vicinity of the project. SR-65 runs generally northwest from I-80 and joins State Route 70 (SR-70) near the town of Marysville. Near the I-80 connector, SR-65 is a four-lane expressway with interchanges at North Harding Boulevard/Stanford Ranch Road, Pleasant Grove Boulevard, Blue Oaks Boulevard, and Washington Boulevard.
- **Pacific Street.** Pacific Street is a two-lane roadway located east of Granite Drive, a four-lane roadway from Rocklin Road to Sierra Meadows Drive, and a two-lane roadway north of Sierra Meadows Drive. Pacific Street is classified as an Arterial in the City General Plan Circulation Element and is classified as a Truck Route by the City. This roadway provides travel throughout the entire City limits. Pacific Street becomes Taylor Road east of Sierra College Drive.
- **Rocklin Road.** Rocklin Road is an east-west roadway located south of the project site. West of Sierra College Boulevard, Rocklin Road is a four-lane roadway. Immediately east of Sierra College Boulevard, there are two eastbound and one westbound travel lanes. Farther east, Rocklin Road becomes a two-lane roadway and terminates at Barton Road.



- **Dominguez Road.** Dominguez Road is classified as a Collector roadway on the City's General Plan. North of Pacific Street, Dominguez Road becomes Del Mar Avenue. Dominguez Road/Del Mar Avenue is currently a two-lane undivided roadway. Currently, Dominguez Road terminates at Granite Drive, west of I-80. Dominguez Drive is planned to be extended across I-80 and will terminate at Sierra College Boulevard. The Dominguez Road extension is included in the City's Traffic Impact Fee and Capital Improvement Program (CIP).
- **Brace Road.** Brace Road is a two-lane east-west roadway located north of the project site. This roadway is located within the Town of Loomis.
- Horseshoe Bar Road. This roadway is located within the Town of Loomis and provides access to I-80. Horseshoe Bar Road is a two-lane roadway running in a northwest-southeast direction and is located north of the project site.

Existing Conditions at the Rail Crossing with Sierra College Boulevard just North of Taylor Road

The rail line running roughly parallel to Pacific Street in the City of Rocklin and Taylor Road in the Town of Loomis is owned by Union Pacific Railroad (UPRR) and is part of the Roseville Subdivision. Amtrak operates two passenger trains on this line. The California Zephyr offers one eastbound and one westbound train daily. The western terminus of this route is Oakland, CA, while the eastern terminus is Chicago, IL. Within the normal variation of Amtrak service, the eastbound train should cross Sierra College Boulevard at 11:25 a.m. each day, and the westbound train should cross at 2:20 p.m. each day.

Amtrak (with operational subsidies from the California Department of Transportation) also operates the Capitol Corridor commuter train between San Jose, CA, and Reno, NV. Not all of these commuter trains travel as far north as Rocklin and Loomis. Out of all the commuter trains, only seven eastbound trains and five westbound trains cross Sierra College Boulevard each weekday. This number reduces to four eastbound and four westbound trains on Saturday. No trains are scheduled to cross during the weekday a.m. peak period (7:00 a.m.–9:00 a.m.). Three trains are scheduled to cross during the weekday p.m. peak period (4:00 p.m.–6:00 p.m.).

Freight service uses this rail line in addition to the regularly scheduled passenger trains. The Burlington Northern-Santa Fe Railroad (BNSF) has trackage rights and uses this UPRR rail line for some of its freight trips as well. The Federal Railroad Administration Office of Safety Analysis surveyed freight trips along this corridor in 1996 and again in 2001. Those surveys showed that between 8 and 10 freight trains traverse the Roseville Subdivision on an average day. The Federal Railroad Administration Office of Safety Analysis also records accidents involving trains. No accidents were reported at the train crossing on Sierra College Boulevard after 1996. Records do show three accidents in 1977, one accident in 1981, one accident in 1988, and one accident in 1996 in the City of Rocklin.

LSA conducted field observations on two separate days to verify whether any of the 8–10 average daily freight trains and/or the scheduled passenger trains cross Sierra College Boulevard during the peak hours. The railroad crossing at Sierra College Boulevard was surveyed on two nonconsecutive weekdays (Wednesday and Thursday) during the peak hours of traffic conditions along Sierra College Road [both a.m. peak hour (7:00 a.m.–8:00 a.m.) and p.m. peak hour (4:00 p.m.–5:00 p.m.)]. There

were no trains during this time period. Hence, there is no impact of train crossings on traffic conditions along Sierra College Boulevard during the a.m. and p.m. peak hours. It was observed that there was a passenger train that crossed Sierra College Boulevard at 6:55 a.m. heading west on Wednesday, and at 6:50 a.m. heading west on Thursday. The gates on Sierra College Boulevard were closed for traffic for 32 seconds, and two vehicles had queued in the northbound direction. There was no queue in the southbound direction, and the vehicles cleared immediately after the gate was opened.

Existing Traffic Volumes

Existing traffic counts at the 21 study intersections were collected in October 2006 (a.m. and p.m. peak hours) and September 2006 (Saturday peak hour). These counts were taken during a nonholiday (excluding summer and winter break) period when schools were in session and therefore include the traffic generated by Sierra College and all schools within the study area. The City of Rocklin collected traffic counts in April 2008 at major intersections within the City. Ten of the intersections counted in April 2008 were also Rocklin Commons study area intersections. A comparison between the 2006 volumes and 2008 volumes revealed that traffic was lower in 2008 at 8 of the 10 common intersections. Only the I-80/Rocklin Road interchange intersections (I-80 westbound ramp/Rocklin Road) had higher volumes in 2008, and those volumes were higher by only 1 percent. It is likely that these intersections experienced more traffic due to construction at the Sierra College Boulevard/I-80 ramp intersections and not because of ambient traffic growth. Traffic counts taken in 2006 are generally higher and provide a conservative basis for traffic analysis of study intersections. Hence, the intersection analysis was performed using the October 2006 (a.m. and p.m. peak hour) counts. The existing a.m. and p.m. peak-hour and Saturday peak-hour traffic volumes are illustrated in Figures 5 and 6 and are available in Appendix A.

Existing Levels of Service

Levels of service at study area intersections and roadway segments were calculated for the existing conditions and are summarized in Tables A and B. The existing LOS worksheets are provided in Appendix B.

As shown in Table A, the following three intersections are operating at an unsatisfactory LOS in the existing condition.

- Rocklin Road/Pacific Street
- Sierra College Boulevard/Taylor Road (Loomis)
- Horseshoe Bar Road/Taylor Road (Loomis)

As shown in Table B, most of the study area roadway segments are forecast to operate within their daily roadway capacities in the existing condition except for the following three segments:

- Taylor Road between King Road and Horseshoe Bar Road
- Sierra College Boulevard between Taylor Road and I-80
- Sierra College Boulevard between Dominguez Road (Future Intersection) and Rocklin Road

<pre> </pre>	Remainer Colore W	$\begin{array}{c} 1000 \\ 10$	$\begin{array}{c} 425 \\ 686 \\ 701 \\ 713 \\ 713 \\ 712 \\ 712 \\ 712 \\ 712 \\ 712 \\ 713 \\$	$\begin{array}{c} 88\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\$
N		1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
state for			$\begin{array}{c} 61/18\\ 94/9\\ 97/8$	42 / 7 1 47 / 7 47 / 7 36 / 60 1 1 4 20 / 23 1 1 6 20 / 23 1 90 / 23 90 / 23 1 1
		$\begin{array}{c} 601 \ Fit = 100 \ Fit =$	1 1 </th <th>$\begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\$</th>	$\begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1 \\$
NORTH Legend Study Area 12 Future Intersa Future Roads			10 Older a College Environmental 10 115 / 31 11 Sierra College/-80 EB Ramp	Future Intersection
$\begin{array}{c} 99 \\ 84 \\ 144 \\ 144 \\ 144 \\ 144 \\ 242 \\ 242 \\ 242 \\ 242 \\ 242 \\ 244 \\ 2$	$\begin{array}{c} 6/10\\ 6/10\\ 6/10\\ 6/8 \\ 1/12\\ 6/8 \\ 1/12\\$	$\begin{array}{c} 7000 \\ 70$	← 245/245 ← 245/245 50/50 ↓ ← 98/98 50/50 ↓ ← 55 50/50 ↓ ←	← 110/57 ↓ 105/114 79/64 → ♥ ↑ 124/150 ↓ ११/ ११/ ११/ ११/ ११/ ११/ ११/ ११/
13 Sierra College/Rocklin Rd 1	4 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
33/61 ↓ 33/61 83/61 ↓ ↓ 81/01 ↓ ↓ 82/08 ↓ ↓ 82/08 ↓ ↓	$\begin{array}{c} 100/63\\$	Control = 10 minute with the second	$\begin{array}{c} 662 \\ 87 \\ 87 \\ 87 \\ 87 \\ 87 \\ 87 \\ 87 \\ 8$	Future Intersection
18 Barton Rd/Rocklin Rd 1	9 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 5

Rocklin Commons Existing Peak Hour Traffic Volumes

				1
N	emailen kolonn inn	$\begin{array}{c} 114\\ 91 \leftarrow 48\\ 22 \rightarrow 92\\ 56 \rightarrow 92\\ 22 \rightarrow 92$ 22 \rightarrow 92	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
AND		 261 498 203	$ \begin{array}{c} $	0, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
		24 29 49 25 25 220 25 220 37 83 7 Sierra College Blvd/Taylor Rd	$ \begin{array}{c c} & 1 \\$	9 Sierra College Blvd/Granite Dr
NORTH Legend Study Area 12 Future Inte Future Roa	ersection	88 88 88 89 89 89	82 40 247 1 192 7 15 192 7 15 1	
		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	Future Intersection 12 Sierra College/Dominguez Rd
$\begin{array}{c} 25 \\ 167 \\ 287 \\ 89 \\ -7 \\ 84 \\ 152 \\ 188 \\ 188 \\ 188 \end{array} \stackrel{?}{\leftarrow} 152 \\ 188 \\ -7 \\ 188 \\ -7 \\ -7 \\ -7 \\ -7 \\ -7 \\ -7 \\ -7 \\ $	$\begin{array}{c} 16 \\ 8 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	962 → 957 → 5 85 24	← 56 ⊊ 60 52 → ♥ ♂ 21 ⊋ 8
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
୫.୧% ∠J↓ 75_ୀ ୩↑ 173 ጊ ୫.୫	$\begin{array}{c} 10 \\ 687 \\ -2 \end{array} 10 \\ -2 \end{array} 10 \\ -2 \end{array} 14 10 \\ -2 \end{array} 14 10 \\ -2 \end{array} 10 \\ -2 \end{array} 10 \\ -2 \\ -2 \\ -2 \\ -2 \\ -2 \\ -2 \\ -2 \\ -$	278 4 ↓ ↑ ↑ ↑ ↑ ↓ 1 278	$\begin{array}{c} \begin{array}{c} & 176\\ 67\\ 67\\ -2 \end{array} \\ \hline \\ & -57\\ -2 \end{array} \\ \hline \\ \\ \\ \\ & -57\\ -2 \end{array} \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	Future Intersection
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 6

1234 Saturday Peak Hour Volume

Rocklin Commons Existing Saturday Peak Hour Traffic Volumes

Table A: Existing Peak Hour Intersection Level of Service Summary

		Existing Condition						
		AM Peak Ho	ur	PM Peak Hour		Saturday		
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	
1 Rocklin Road/Pacific Street ¹	Signalized	0.881	D	0.850	D	0.544	А	
2 Rocklin Road/Granite Drive	Signalized	0.467	А	0.785	С	0.543	А	
3 Rocklin Road/I-80 Westbound Ramps	Signalized	21.8 sec	С	22.4 sec	С	23.2 sec	С	
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	28.0 sec	С	26.2 sec	С	12.5 sec	В	
5 Dominguez Road/Pacific Street ¹	Signalized	0.408	А	0.465	А	0.255	А	
6 Dominguez Road/Granite Drive ¹	Unsignalized	11.7 sec	В	11.9 sec	В	9.9 sec	А	
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.737	С	0.873	D	0.508	А	
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.509	А	0.604	В	0.341	А	
9 Sierra College Boulevard/Granite Drive	Signalized	0.625	В	0.644	В	0.461	А	
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	27.0 sec	С	24.4 sec	С	17.3 sec	В	
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	31.0 sec	С	33.5 sec	С	23.3 sec	С	
12 Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-	-	
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.710	С	0.792	С	0.532	А	
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.920	Е	1.098	F	0.688	В	
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	20.0 sec	С	20.9 sec	С	22.3 sec	С	
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹ (Loomis)	Unsignalized	16.4 sec	С	16.0 sec	С	12.1 sec	В	
17 Barton Road/Brace Road ¹ (Loomis)	Unsignalized	16.1 sec	С	15.0 sec	С	9.5 sec	А	
18 Barton Road/Rocklin Road ¹ (Loomis)	Unsignalized	15.6 sec	С	10.9 sec	В	10.2 sec	В	
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.436	А	0.525	А	0.331	А	
20 Sierra College Boulevard/English Colony Way ¹ (Placer County)	Unsignalized	10.9 sec	В	13.4 sec	В	10.5 sec	В	
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.760	С	0.722	С	0.489	А	
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-	

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

Exceeds level of service criteria

Table B: Existing Daily Roadway Segment Level of Service Summary

Deedman	Comment	Configuration	Capacity	Weekday			Saturday		
Roadway	Segment			Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	Two-lane Collector	15,000	17,060	1.14	F	11,370	0.76	С
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	10,673	0.71	В	3,500	0.23	А
	Sierra College Boulevard and City Limits ¹ (Loomis)	Two-lane Collector	15,000	11,578	0.77	С	5,880	0.39	А
Pacific Street	City Limits and Dominguez Road ¹	Two-lane Collector	15,000	11,578	0.77	С	5,880	0.39	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	15,889	0.53	А	6,820	0.23	А
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	21,211	0.71	В	11,040	0.37	А
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	9,989	0.33	А	13,090	0.44	А
	Sierra College Boulevard and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	5,176	0.35	А	4,060	0.27	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	3,354	0.22	А	2,040	0.14	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	6,101	0.41	А	6,460	0.43	А
Brace Road	I-80 and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	4,006	0.27	А	1,940	0.13	А
	I-80 and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	3,408	0.23	А	560	0.04	А
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	Two-lane Collector	15,000	9,600	0.64	В	6,570	0.44	А
	King Road and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	10,560	0.70	В	7,080	0.47	А
	Taylor Road and I-80	Two-lane Collector	15,000	17,566	1.17	F	8,610	0.57	А
	I-80 and Dominguez Road ²	Two-lane Collector	15,000	13,275	0.88	D	10,400	0.69	В
	Dominguez Road ² and Rocklin Road ¹	Two-lane Collector	15,000	13,275	0.88	D	10,840	0.72	С
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	Four-lane Undivided Arterial	30,000	6,178	0.21	А	4,350	0.15	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	8,258	0.28	А	7,850	0.26	А
Dominguez Road	Taylor Road and Granite Drive ¹	Two-lane Collector	15,000	2,382	0.16	А	510	0.03	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	5,610	0.37	А	3,460	0.23	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

² Proposed location of the future extension of Dominguez Road.

Exceeds level of service criteria

PROJECT TRIP GENERATION AND DISTRIBUTION

The proposed project is a regional shopping center with a maximum 415,000 sf of retail/commercial use, including a 159,170 sf major tenant. An estimation of the number of vehicle trips was generated for the site using the trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition. As indicated in Table C, the project is forecast to generate 15,414 daily trips, 331 a.m. peak-hour trips, 1,441 p.m. peak-hour trips, and 1,965 Saturday mid-day peak-hour trips.

Many of the trips generated by a retail shopping center such as the Rocklin Commons project would be pass-by trips, or trips whose primary destination is not the shopping center. These would include trips such as a work-to-home trip that stops at a retail center on the way. These trips would not be new trips generated by the project; rather, they are trips that are already on the roadway network that would make a stopover at the proposed shopping center. ITE's *Trip Generation Handbook* (2004) provides estimates of pass-by trip percentages for various types of land uses. The *Trip Generation Handbook* estimates pass-by trips to vary between 8 percent and 89 percent for the land uses shown in Table C. Rather than apply the more aggressive trip reduction of 8 to 89 percent, a conservative estimate of 10 percent average pass-by trip reduction rate was applied to the trips generated by the entire retail center.

Project trips were distributed throughout the study area using the City's traffic analysis model. The select zone model assignments for the proposed project were used to obtain the trip distribution. The regional trip distribution percentages from the traffic model and the resulting project trips at each intersection are illustrated in Figures 7 and 8. It should be noted that the distribution percentages shown in the figures are the generalized distribution for illustration only and do not reflect all project trips that may be destined within the study area. This interaction between land uses in the study area is reflected in the actual trip assignment volumes. It should also be noted that the land uses in the traffic model are generic commercial/retail uses and do not necessarily reflect characteristics of specific retailers (target, Kohl's etc.). This is appropriate because retailers on any given site can change over time.

EXISTING PLUS PROJECT

Traffic volumes generated by the proposed project were added to the existing traffic volumes and LOS were calculated for the existing plus project scenario. Construction of the project will follow construction of other previously approved projects in the study area, specifically the redesign of the I-80 interchange with Sierra College Boulevard, therefore the existing plus project conditions are not the real-world physical condition (where the project will be constructed before other approved projects in the region) that the project will affect. However, an existing plus project condition has nevertheless been analyzed for disclosure purposes. The existing plus project weekday and Saturday peak-hour traffic volumes are illustrated in Figures 9 and 10. The LOS for study area intersections and roadway segments in the existing plus project scenario is shown in Tables D and E. The existing plus project LOS worksheets are provided in Appendix C.

Table C - Rocklin Commons Trip Generation

				A.M. Peak Hour		lour	P.M. Peak Hour			Saturday			
Land Use	Size	Units	ADT	In	Out	Total	In	Out	Total	In	Out	Total	
Shopping Center	415.000	TSF											
Trip Rate ^{1,2}			41.27	0.54	0.35	0.89	1.85	2.01	3.86	2.74	2.52	5.26	
Trip Generation			17,126	224	143	368	769	833	1,601	1,135	1,048	2,183	
Total Site Gross Trips			17,126	224	143	368	769	833	1,601	1,135	1,048	2,183	
Total Site Pass-by Trips ³	10.0%		-1713	-22	-14	-37	-77	-83	-160	-114	-105	-218	
Total Site Trip Generation	415.000	TSF	15,414	202	129	331	692	749	1,441	1,022	943	1,965	

Note: volumes shown rounded to nearest integer

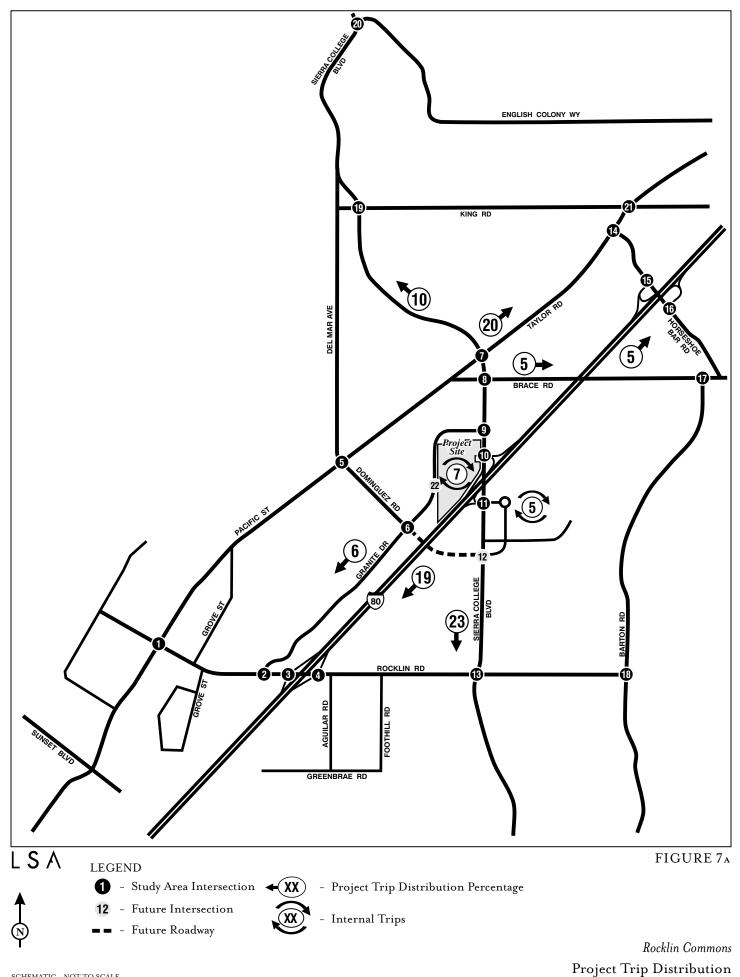
¹ Average rate derived from total site generation (415 TSF) using fitted curve equations for Land Use 820 - Shopping Center from *ITE Trip Generation (7th Edition)*

² ADT: Ln(T) = 0.65 Ln(X) + 5.83; AM: Ln(T) = 0.60 Ln(X) + 2.29; PM: Ln(T) = 0.66 Ln(X) + 3.40; Saturday: Ln(T) = 0.65 Ln(X) + 3.77

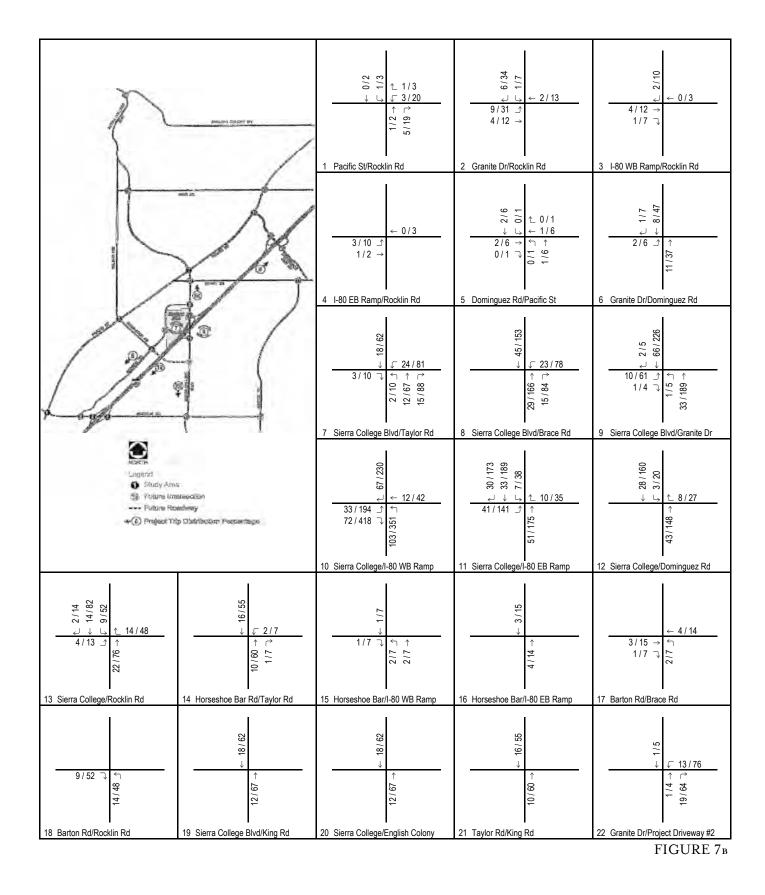
³ Pass-by trip percentages from *ITE Trip Generation Handbook*, 2004 vary between 8% and 89% for this land use.

However, a 10% estimate has been used as a conservative average pass-by trip reduction rate for the entire retail center.

TSF = Thousand square feet

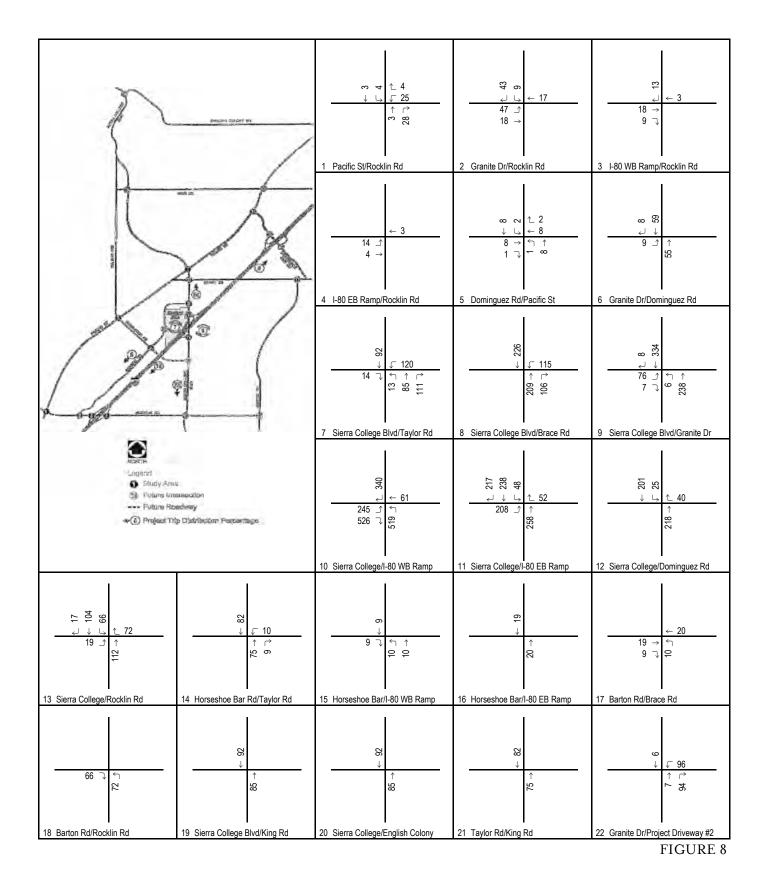


SCHEMATIC - NOT TO SCALE



123 / 456 AM / PM Peak Hour Volume

Rocklin Commons
Project Trip Distribution and Peak Hour Project Trips



1234 Saturday Peak Hour Volume

Rocklin Commons Saturday Peak Hour Project Trips

P	tomaion tocom ter	$\begin{array}{c} 952\\12/64\\12/64\\12/24\\123/23\\1$	$\begin{array}{c} 1000 \\ 10$	$\begin{array}{c} 88 \\ 87 \\ 987 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 339 / 503 \\ 624 / 698 \\ 413 / 523 \\ 7 \end{array}$
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
Delivery of the second se			$\begin{array}{c} 61/19\\ \hline 61/19\\ \hline 62/98\\ \hline 1/27\\ \hline 320/407\\ \hline 36/21\\ \hline \\ 5 \end{array} \begin{array}{c} 1/27\\ \hline 1/27\\$	4 4 </th
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 10	$\begin{array}{c} 0 & 0 & 0 \\ 2 & 2 & 2 \\ 2 & 2 & 2 \\ 2 & 2 & 2 \\ 2 & 2 &$
		7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Bivd/Granite Dr
NORTH Legend Study Area 12 Future Inter Future Roa	rsection	$\begin{array}{c} 88\\ 82/12\\ 42\\ 42\\ 42\\ 42\\ 42\\ 42\\ 42\\ 42\\ 42\\ 4$	266: /251 198 / 142 247 / 352 115 / 31 → 115 / 31 → 115 / 31	641/953 → 641/953 → 27/8 → 20
T		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 1000 \\ 10$	$\begin{array}{c} 406/572\\ + 406/572\\ + 406/572\\ + 14/13\\ + 14/7\\ - 14/7\\ - 127\\ + 22/8\\ - 14/7\\ - 112\\ + 14/7\\ - 112\\ + 112\\ - 112\\$	286 / 167 74 / 25 74 / 25 75 / 24 / 25 76 / 24 / 25 77 / 74 77 / 74 77 / 74 / 75 88	087 / 312 / 312 097 / 312 / 312 097 / 312 → 097 / 312 / 312 097 / 312 / 312 097 / 312 / 312 097 / 312	← 114 / 71 ↓ 105 / 114 82 / 79 → ↑ ↑ 125 / 157 ↓ 931 931 931 931 931 931 931 931
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
52 / 88 ↓ <	$\begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & &$	$\begin{array}{c c} & \leftarrow & 536/376 \\ & \leftarrow & 536/376 \\ & \downarrow & \uparrow & \uparrow \\ & \uparrow & \uparrow & \uparrow \\ & 1/4 & \downarrow & \downarrow \\ & 1/4 & \downarrow & 1/4 & \downarrow \\$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	121 / 345 → 121 / 345 → 121 / 345 → 121 / 345 → 132 / 345 /
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 9

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons Existing Plus Project Peak Hour Traffic Volumes

			_	
N	treaser toolori ter	$\begin{array}{c} 118\\ 91\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 1$	$\begin{array}{c c} & L & 295 \\ \hline L & 295 \\ \hline 257 & \hline & 397 \\ \hline & \downarrow & \downarrow & \downarrow & 5 \\ \hline 259 & \uparrow & \uparrow & \uparrow & \uparrow \\ 396 & \rightarrow & \complement & 92 & 61 \\ 11 & \neg \end{array}$	کھ ہے کھ ← 382 ہے ہے ہے ہے 145 663 → 81 ⊋
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
be interest		1 1-80 EB Ramp/Rocklin Rd	$ \begin{array}{c} & \swarrow & \uparrow \\ & & & & \uparrow \\ & & & & \downarrow & \downarrow \\ & & & \downarrow & \downarrow & \downarrow \\ & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & \downarrow & \downarrow & \downarrow \\ & & & & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & & & & & \downarrow & $	80 000 000 000 000 000 000 000 000 000
		$\begin{array}{c} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\$	117 → 117 117 → 117	$\begin{array}{c} 106 \\ 1106 \\ 1106 \\ 1152 \\ 115$
	1	7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
NORTH Legend 1 Study Area 12 Future Int Future Ro	ersection	$\begin{array}{c} 1 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\$	$\begin{array}{c} 562 \\ 455 \\ 455 \\ 192 \end{array} \xrightarrow{\uparrow} 192 \end{array} \xrightarrow{\uparrow} 192 $	008 → → ← 40
		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	I 12 Sierra College/Dominguez Rd
$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	$\begin{array}{c} & 10\\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$	$\begin{array}{c} 100 \\ 110 \\$	272 → 772 → 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	← 76 ↓ 60 71 → ୍ ୮ 30 ጊ ଝ ଛ
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
8 8 ↓ ↓ 75 ♪ ↑ ↑ 239 ↓ ½ 8 8	$\begin{array}{c} \swarrow & 47 \\ \swarrow & 538 \\ 2 & 10 \\ 14 \\ 14 \\ 8 \\ 7 \end{array}$	88 21 → 13 ↑ 12 88 7 88 7 7 88 7 88 7 88 7 1 1 1 1 1 1 1 1 1 1 1 1 1		211 → 268 211 → 103 → 103
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 10

1234 Saturday Peak Hour Volume

Rocklin Commons Existing Plus Project Saturday Peak Hour Traffic Volumes

Table D: Existing Plus Project Peak Hour Intersection Level of Service Summary

		Existing Condition Existing Plus Project Cond										ition			
		AM Peak Hour		PM Peak Ho	ur	Saturday		AM Peak Hour		PM Peak Hour		Saturday			
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS		
1 Rocklin Road/Pacific Street ¹	Signalized	0.881	D	0.850	D	0.544	А	0.887	D^2	0.876	D^2	0.578	А		
2 Rocklin Road/Granite Drive	Signalized	0.467	А	0.785	С	0.543	Α	0.475	А	0.841	D	0.589	Α		
3 Rocklin Road/I-80 Westbound Ramps	Signalized	21.8 sec	С	22.4 sec	С	23.2 sec	С	21.9 sec	С	27.0 sec	С	23.3 sec	C		
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	28.0 sec	С	26.2 sec	С	12.5 sec	В	28.1 sec	С	29.5 sec	С	12.8 sec	В		
5 Dominguez Road/Pacific Street ¹	Signalized	0.408	А	0.465	Α	0.255	Α	0.411	А	0.470	А	0.266	Α		
6 Dominguez Road/Granite Drive ¹	Unsignalized	11.7 sec	В	11.9 sec	В	9.9 sec	Α	11.9 sec	В	13.0 sec	В	11.0 sec	В		
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.737	С	0.873	D	0.508	А	0.772	С	0.992	Е	0.667	В		
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.509	А	0.604	В	0.341	А	0.560	А	0.786	С	0.576	Α		
9 Sierra College Boulevard/Granite Drive	Signalized	0.625	В	0.644	В	0.461	Α	0.678	В	0.842	D	0.764	С		
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	27.0 sec	С	24.4 sec	С	17.3 sec	В	18.5 sec	В	30.3 sec	С	35.4 sec	D		
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	31.0 sec	С	33.5 sec	С	23.3 sec	С	9.1 sec	Α	9.6 sec	А	15.1 sec	В		
12 Sierra College Boulevard/Dominguez Road	-	-	-	-	-	-	-	-	-	-	-	-	-		
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.710	С	0.792	С	0.532	Α	0.728	С	0.829	D	0.651	В		
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.920	Е	1.098	F	0.688	В	0.929	E^2	1.145	F^2	0.746	С		
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	20.0 sec	С	20.9 sec	С	22.3 sec	С	20.0 sec	С	21.7 sec	С	22.4 sec	С		
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹ (Loomis)	Unsignalized	16.4 sec	С	16.0 sec	С	12.1 sec	В	16.5 sec	С	16.4 sec	С	12.4 sec	В		
17 Barton Road/Brace Road ¹ (Loomis)	Unsignalized	16.1 sec	С	15.0 sec	С	9.5 sec	А	16.5 sec	С	16.1 sec	С	9.9 sec	А		
18 Barton Road/Rocklin Road ¹ (Loomis)	Unsignalized	15.6 sec	С	10.9 sec	в	10.2 sec	В	16.1 sec	С	11.6 sec	В	11.0 sec	В		
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.436	А	0.525	А	0.331	А	0.450	А	0.574	А	0.396	А		
20 Sierra College Boulevard/English Colony Way ¹ (Placer County)	Unsignalized	10.9 sec	В	13.4 sec	В	10.5 sec	В	11.1 sec	В	14.5 sec	В	11.4 sec	В		
21 Taylor Road/King Road 1 (Loomis)	Signalized	0.760	С	0.722	С	0.489	А	0.768	С	0.744	С	0.541	Α		
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-	0.092	А	0.154	А	0.135	Α		

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Project impact is less than 5% of total intersection V/C or delay and therefore not a significant impact.

Exceeds level of service criteria

(Shade) = Significant Impact

Table E: Existing Plus Project Daily Roadway Segment Level of Service Summary

	Volume		Exis	sting	g			Existing Plus Project							
Roadway		Configuration	Capacity	1	Weekday		5	Saturday		1	Weekday			Saturday	r
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road 1 (Loomis)	Two-lane Collector	15,000	17,060	1.14	F	11,370	0.76	С	18,210	1.21	F	12,940	0.86	D
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	10,673	0.71	В	3,500	0.23	А	12,163	0.81	D	5,535	0.37	А
	Sierra College Boulevard and City Limits ¹ (Loomis)	Two-lane Collector	15,000	11,578	0.77	С	5,880	0.39	А	11,778	0.79	С	6,150	0.41	А
Pacific Street	City Limits and Dominguez Road ¹	Two-lane Collector	15,000	11,578	0.77	С	5,880	0.39	А	11,718	0.78	С	6,080	0.41	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	15,889	0.53	А	6,820	0.23	А	16,009	0.53	А	6,980	0.23	А
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	21,211	0.71	В	11,040	0.37	А	21,501	0.72	С	11,970	0.40	А
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	9,989	0.33	Α	13,090	0.44	А	10,149	0.34	Α	13,305	0.44	А
	Sierra College Boulevard and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	5,176	0.35	А	4,060	0.27	А	6,176	0.41	А	5,440	0.36	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	3,354	0.22	А	2,040	0.14	А	3,424	0.23	А	2,135	0.14	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	6,101	0.41	А	6,460	0.43	А	6,391	0.43	А	6,850	0.46	А
Brace Road	I-80 and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	4,006	0.27	А	1,940	0.13	А	4,436	0.30	А	2,520	0.17	А
	I-80 and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	3,408	0.23	А	560	0.04	А	5,028	0.34	А	2,770	0.18	А
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	Two-lane Collector	15,000	9,600	0.64	В	6,570	0.44	А	10,890	0.73	С	8,340	0.56	А
	King Road and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	10,560	0.70	В	7,080	0.47	А	11,850	0.79	С	8,850	0.59	А
	Taylor Road and I-80	Two-lane Collector	15,000	17,566	1.17	F	8,610	0.57	А	22,376	1.49	F	15,170	1.01	F
	I-80 and Dominguez Road ²	Four-lane Undivided Arterial	30,000	13,275	0.44	D	10,400	0.35	В	16,870	0.56	А	15,300	0.51	А
	Dominguez Road ² and Rocklin Road ¹	Two-lane Collector	15,000	13,275	0.88	D	10,840	0.72	С	16,240	1.08	F	14,885	0.99	Е
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	Four-lane Undivided Arterial	30,000	6,178	0.21	А	4,350	0.15	А	7,038	0.23	А	5,490	0.18	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	8,258	0.28	А	7,850	0.26	А	9,038	0.30	Α	8,915	0.30	А
Dominguez Road	Taylor Road and Granite Drive ¹	Two-lane Collector	15,000	2,382	0.16	А	510	0.03	А	2,517	0.17	А	685	0.05	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	5,610	0.37	А	3,460	0.23	А	5,610	0.37	А	3,460	0.23	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

² Proposed location of the future extension of Dominguez Road.

Exceeds level of service criteria

As shown in Table D, the following four intersections are forecast to operate at unsatisfactory LOS in the existing plus project scenario:

- Rocklin Road/Pacific Street
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)

The project would have a significant impact on the intersections of Sierra College Boulevard/Taylor Road and Sierra College Boulevard/Rocklin Road in the existing plus project condition. The project impact at the intersections of Rocklin Road/Pacific Street and Horseshoe Bar Road/Taylor Road is less that 5 percent (0.05) of the total intersection volume-to-capacity ratio and therefore not a significant impact.

As shown in Table E, most of the study area roadway segments are forecast to operate within their daily roadway capacities in the existing plus project condition except for the following four segments:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Sierra College Boulevard between Taylor Road and I-80
- Sierra College Boulevard between Dominguez Road and Rocklin Road

A directional peak-hour roadway segment analysis was prepared for these five segments and is shown in Table F. In both a.m. and p.m. peak hours, the five affected roadway segments will operate at LOS A or B. Because the roadway segments will operate with satisfactory LOS during the peak hour of roadway traffic, they are not considered impacted by the project.

EXISTING PLUS APPROVED PROJECTS (BASELINE)

Existing Plus Approved Projects (Baseline) Traffic Volumes

To identify traffic conditions that could be expected at the time of project opening, an existing plus approved projects (baseline) scenario was developed. The City provided a list of approved projects in the vicinity of the project. The approved projects include interchange improvements at I-80 and Sierra College Boulevard, as the interchange improvements have CEQA approval and are fully funded and currently under construction. Short-term geometrics and traffic control for project scenarios are illustrated in Figure 11. The approved projects do not include the proposed Dominguez Road extension. The approved projects list is provided in Appendix D. Traffic volumes for approved projects were determined by applying the trip generation rates from the ITE *Trip Generation*, 7th Edition, to the approved land uses. Vehicle trips from approved projects in relation to other land uses and local and regional transportation networks. The locations of the approved projects and trip distribution are illustrated in Figure 12. The approved projects and their respective trip generation are shown in Table G.

Existing Existing + Project Roadway Segment Capacity Volume V/C LOS Volume V/C LOS Taylor Road King Rd and Horseshoe Bar Rd (Loomis) 0.42 699 0.42 A.M. Peak Hour Northbound 1,650 689 А А 838 0.51 A.M. Peak Hour Southbound 1,650 822 0.50 А А Total A.M. Peak Hour 3,300 1,537 0.47 1,511 0.46 А Α P.M Peak Hour Northbound 1,650 1,055 0.64 В 1,115 0.68 В P.M Peak Hour Southbound 1,650 828 0.50 А 883 0.54 А Total P.M. Peak Hour 3,300 1,883 0.57 1,998 0.61 A A SAT Peak Hour Northbound 1,650 612 0.37 687 0.42 А А SAT Peak Hour Southbound 700 0.42 1,650 618 0.37 A A 0.42 Total SAT Peak Hour 3,300 1,230 0.37 A 1,387 А Faylor Road Horseshoe Bar Rd and Sierra College Blvd (Loomis) A.M. Peak Hour Northbound 1,650 336 0.20 351 0.21 A А A.M. Peak Hour Southbound 1,650 435 0.26 А 459 0.28 А Total A.M. Peak Hour 3,300 771 0.23 810 0.25 Α А 672 0.41 P.M Peak Hour Northbound 1,650 588 0.36 А А 509 590 0.36 P.M Peak Hour Southbound 1,650 0.31 В В Total P.M. Peak Hour 3,300 1,097 0.33 А 1,262 0.38 В SAT Peak Hour Northbound 1,650 446 0.27 А 530 0.32 А SAT Peak Hour Southbound 1,650 422 0.26 A 514 0.31 A Total SAT Peak Hour 3,300 868 0.26 A 1,044 0.32 А Taylor Road Sierra College Blvd and City Limits (Loomis) A.M. Peak Hour Northbound 1,650 303 306 0.19 0.18 А А A.M. Peak Hour Southbound 1,650 552 0.33 554 0.34 А А Total A.M. Peak Hour 3,300 855 0.26 860 0.26 A А P.M Peak Hour Northbound 1,650 554 0.34 564 0.34 А А P.M Peak Hour Southbound 495 0.30 505 0.31 1,650 Α А 1,049 Total P.M. Peak Hour 3,300 1,069 0.32 0.32 А А 287 0.17 SAT Peak Hour Northbound 1,650 273 0.17 Α А SAT Peak Hour Southbound 1,650 290 0.18 А 303 0.18 А Total SAT Peak Hour 3,300 563 0.17 A 590 0.18 А Pacific Street City Limits and Dominguez Rd 402 0.24 A.M. Peak Hour Northbound 1,650 400 0.24 А А A.M. Peak Hour Southbound 0.25 1,650 419 0.25 420 А А 0.25 Total A.M. Peak Hour 3,300 819 0.25 A 822 А P.M Peak Hour Northbound 1,650 506 0.31 А 513 0.31 А P.M Peak Hour Southbound 0.29 492 0.30 1,650 485 А А Total P.M. Peak Hour 3,300 991 0.30 1,005 0.30 А А 308 0.19 SAT Peak Hour Northbound 1,650 298 0.18 А А SAT Peak Hour Southbound 265 0.16 275 0.17 1,650 А А Total SAT Peak Hour 3,300 563 0.17 Α 583 0.18 Α Sierra College Boulevard Taylor Rd and I-80 A.M. Peak Hour Northbound 1,650 594 0.36 А 628 0.38 А 636 0.39 703 0.43 A.M. Peak Hour Southbound 1,650 А А 1,331 Total A.M. Peak Hour 3,300 1,230 0.37 0.40 А А

Table F: Existing plus Project Peak Hour Roadway Segment Level of Service Summary

	P.M Peak Hour Southbound	1,650	694	0.42	А	888	0.54	А
	Total P.M. Peak Hour	3,300	1,488	0.45	А	1,912	0.58	В
	SAT Peak Hour Northbound	1,650	475	0.29	А	816	0.49	A
	SAT Peak Hour Southbound	1,650	538	0.33	А	782	0.47	А
	Total SAT Peak Hour	3,300	1,013	0.31	А	1,598	0.48	Α
Sierra College Boulevard	Dominguez Rd and Rocklin Rd							
	A.M. Peak Hour Northbound	1,650	598	0.36	А	649	0.39	А
	A.M. Peak Hour Southbound	1,650	831	0.50	А	862	0.52	А
	Total A.M. Peak Hour	3,300	1,429	0.43	А	1,511	0.46	А
	P.M Peak Hour Northbound	1,650	805	0.49	А	953	0.58	В
	P.M Peak Hour Southbound	1,650	691	0.42	А	851	0.52	В
	Total P.M. Peak Hour	3,300	1,496	0.45	А	1,804	0.55	В
	SAT Peak Hour Northbound	1,650	485	0.29	А	699	0.42	А
	SAT Peak Hour Southbound	1,650	599	0.36	А	825	0.50	А
	Total SAT Peak Hour	3,300	1,084	0.33	А	1,524	0.46	А

1,650

794

0.48

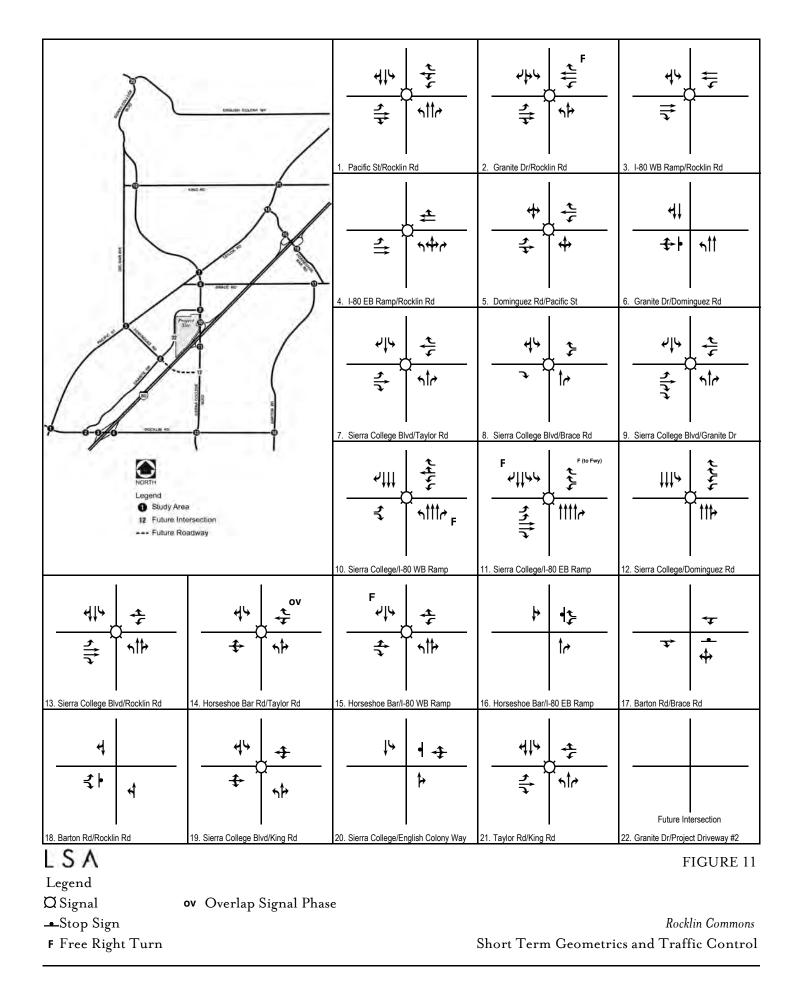
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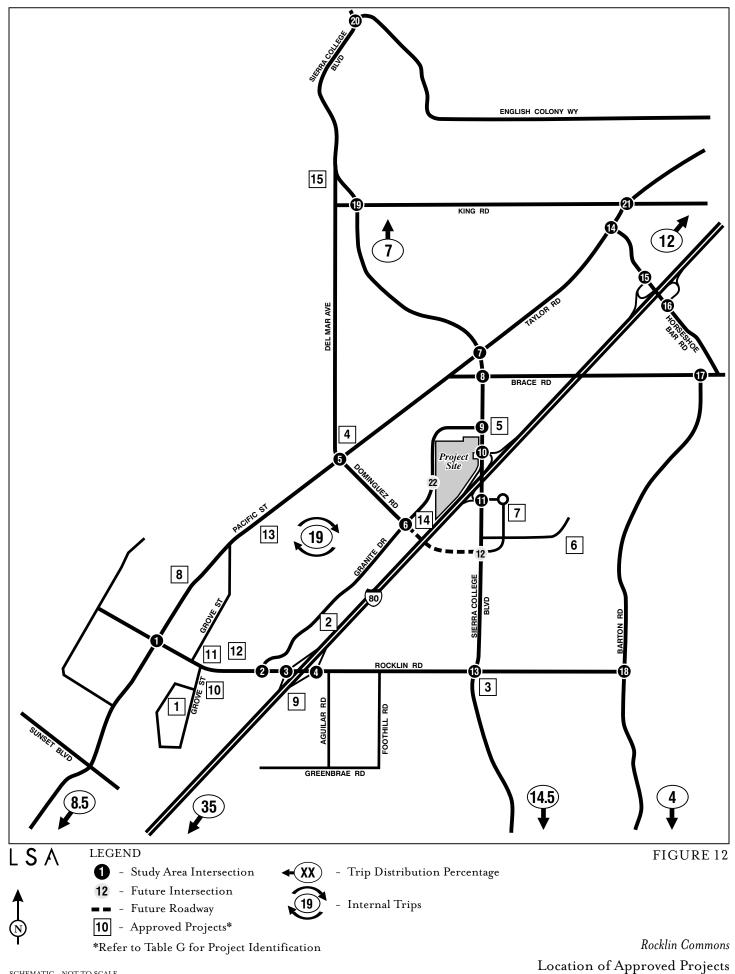
А

0.62

В

P.M Peak Hour Northbound





SCHEMATIC - NOT TO SCALE

Table G: Trip Generation of Approved Projects

Project				AM	Peak H	our	PM	I Peak H	our	Sature	day Peak	Hour
No.	Description	Landuse (ITE Code)	Size	In	Out	Total	In	Out	Total	In	Out	Total
1	Winding Lane Estates	Single Family Detached Housing (210)	27 du	5	15	20	17	10	27	14	12	25
2	Mercedes-Benz of Rocklin	New Car Sales (841)	18.5 ksf	28	10	38	19	30	49	28	27	55
3	Sierra College Center	Mixed Office/Retail	77.0 ksf	76	23	99	80	123	203	109	100	209
4	Rocklin Boat Hotel	Mini-Warehouse (151)	27.3 ksf	2	2	4	4	3	7	5	5	11
5	Granite Marketplace	Shopping Center (820)	138 ksf	87	55	142	248	269	518	357	329	686
6	Croftwood, Unit 1	Single Family Detached Housing (210)	156 du	29	88	117	99	58	158	79	67	147
7	Rocklin Crossings	Shopping Center (820)	543.5 ksf	330	287	617	939	975	1,914	1,180	1,100	2,280
8	ZL Rocklin	Mixed Use Retail/Residential	154.8 ksf	24	63	87	83	59	142	75	72	146
9	Bender Insurance Office Building	Bender Insurance Office Building	14.7 ksf	10	31	41	60	35	95	3	3	6
10	Rocklin DMV	State Motor Vehicles Department (731)	8.7 ksf	43	43	85	74	74	148	6	6	12
11	Grove Street Subdivision Map	Single Family Detached Housing (210)	7 du	1	4	5	4	3	7	4	3	7
12	Meyers Court Subdivision	Single Family Detached Housing (210)	9 du	2	5	7	6	3	9	5	4	8
13	Circuit Place	Single Family Detached Housing (210)	11 du	2	6	8	7	4	11	6	5	10
14	Granite Drive Retail/Office	Shopping Center (820)	22 ksf	14	9	23	40	43	83	57	52	109
15	Clover Valley	Single Family Detached Housing (210)	558 du	105	314	419	355	209	564	283	241	525
	Total			857	1,040	1,897	2,198	2,081	4,279	2,394	2,199	4,593

Existing Plus Approved Projects (Baseline) Levels of Service

Traffic from the approved projects was added to the existing traffic counts and LOS were calculated for the existing plus approved projects scenario. Existing Plus approved projects weekday peak-hour and Saturday traffic volumes are illustrated in Figures 13 and 14. The LOS for study area intersections and roadway segments in the existing plus approved projects scenario are shown in Tables H and I. The existing plus approved projects LOS worksheets are provided in Appendix E.

As shown in Table H, the following seven intersections are operating at an unsatisfactory LOS in the existing plus approved projects condition:

- Rocklin Road/Pacific Street
- Rocklin Road/Granite Drive
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Brace Road (Loomis)
- Sierra College Boulevard/Granite Drive
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)

As shown in Table I, most of the study area roadway segments are forecast to operate within their daily roadway capacities except for the following eight segments:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Pacific Street between City Limits and Dominguez Road
- Sierra College Boulevard between English Colony Way and King Road (Placer County)
- Sierra College Boulevard between King Road and Taylor Road (Loomis)
- Sierra College Boulevard between Taylor Road and I-80
- Sierra College Boulevard between Dominguez Road and Rocklin Road

These segments will exceed the threshold of daily capacity in the existing plus approved projects (baseline) scenario. However, in both a.m. and p.m. peak hours, all affected segments are forecast to operate with satisfactory v/c ratios, except for the roadway segment of Sierra College Boulevard between Dominguez Road and Rocklin Road, as shown in Table J. The Sierra College Boulevard segment between Dominguez Road and Rocklin Road is projected to operate at LOS D during the p.m. peak hour.

		1		I 1
N	Emilian accord w	$\begin{array}{c} 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/234\\ 103/237\\ 103/234\\ 103/234\\ 103/237\\ 103/234\\ 103/23\\ 103/234\\ 103/24\\ 10$	$\begin{array}{c} 699 \\ 697 \\ 602/648 \\ 602/648 \\ \hline \\ 91/2 \\ \hline \\ 49/273 \\ 823/860 \\ 12/23 \\ \hline 12/23 \\ \hline 12/23 \\ \hline \\ 12/23 \\ \hline \\ 12/23 \\ \hline 12/23 \\ \hline \\ 12/23 \\ \hline 1$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
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		$\begin{array}{c} 521 \\ 522 \\ 523 \\$	86/87 465/388 465/	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
		7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
NORTH Legend Study Area 12 Future Inte Future Ros	rsection	SC 1/ 06 218 / 175 218 / 175 406 / 410 ↑ ↑ ↑ 500 / 410 ↑ ↑ ↑ 10 Sierra College/I-80 WB Ramp	262 981 128 / 391 ↓ ↓ ↓ 128 / 391 ↓ ↓ ↓ ↓ 239 / 308 ↑ ↓ ↓ 121 / 344 ↑ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 122 / 178 ↓ ↓ ↓ 125 / 178 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 122 / 178 ↓ ↓ ↓ 121 / 344 ↓ ↓ ↓ 122 / 178 ↓ ↓ ↓ 131 / 105 ↓ <t< th=""><th>12 Sierra College/Dominguez Rd</th></t<>	12 Sierra College/Dominguez Rd
				l i
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 0.14 \\ 0.1 $	$\begin{array}{c} 722 \\$	312/312 → 102/312 → 312/312 → 102/302 02/202 02/202	$\begin{array}{c} \leftarrow 115 / 72 \\ \downarrow 106 / 115 \\ \hline 82 / 71 \rightarrow \bigcirc & \frown & \circlearrowright \\ 128 / 162 & \bigcirc & \underbrace{92}_{LE} \\ \downarrow \underbrace{93}_{LE} \\ \underbrace{93}_{L$
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
288/229 ♪ 56/71 → 56/71 → 56/71 →	$\begin{array}{c} 88 \\ 61 \\ 71 \\ 71 \\ 71 \\ 71 \\ 71 \\ 71 \\ 71$	$\begin{array}{c} \begin{array}{c} \leftarrow 575/470 \\ \leftarrow 575/470 \\ \hline \\ 1/4 \\ 1/$	$\begin{array}{c} 119/32\\ 61/9\\ 61/9\\ 91\\ 928/78\\ 96/91\\ 228/78\\ 96/91\\ 247/321\\ 7\\ 247/321\\ 7\\ 247/321\\ 7\\ 7\\ 247/321\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\$	Future Intersection
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 13

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Existing Plus Approved Projects (Baseline) Peak Hour Traffic Volumes

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N	emission courre we	$\begin{array}{c} 131\\ 131\\ 122\\ 122\\ 122\\ 122\\ 122\\ 122\\$	$\begin{array}{c} \begin{array}{c} & & 1\\ & & 1\\ & & 2\\ & & 2\\ & & 2\\ \end{array} \end{array} \xrightarrow{\begin{array}{c} & & 1\\ & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 1\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 1\\ & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 1\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 1\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array} \begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 2\\ & & 2\\ \end{array}} \begin{array}{c} & & 2\\ & & 2\\ & & 2\\ \end{array} \xrightarrow{\begin{array}{c} & & 2\\ & & 2\\ 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and the second sec			$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	82 ک ل 40 ⊥ → ↑ 19 → 82 6 Granite Dr/Dominguez Rd
		24 24 40 40 164 40 164 40 164 227 67 67 52 57 49 7 Sierra College Blvd/Taylor Rd	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} $
NORTH Legend Study Area 12 Future Inte Future Ros	ersection	<u>526</u> ↓ 51 ↓ ↓ <u>272</u> ↑ ↑ 50 100	55 55 56 ℃ 465 2 → ↓ ↓ ↓ 201 370 ♪ ↑ ♂ 432 → 263 ↓ 88 263 ↓	222 22 22 22 22 22 22 22 22 22 22 22 22
		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 117\\ 117\\ 172\\ 172\\ 172\\ 172\\ 172\\ 172\\$	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $	$\begin{array}{c} 333\\ 2&3\\ 3&3\\ 3&3\\ 3&3\\ 3&3\\ 3&3\\ 3&3\\$	65 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	← 75 ⊊ 61 60 → ్ ≓ 36 ⊋ జ కా
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
258 ↓ 105 258 ↓ 105 258 → 116 258	2 → 67 2 → 50 2 → 50 2 → 10 14 → 53 14 → 8 ↔ 14 → 8 ↔ 14 →	← 467	$\begin{array}{c} 175 \\$	Future Intersection
18 Barton Rd/Rocklin Rd	I 19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	I 21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
		· _ · ·	-	FIGURE 14

1234 Saturday Peak Hour Volume

Rocklin Commons

Existing Plus Approved Projects (Baseline) Saturday Peak Hour Traffic Volumes

Table H: Existing Plus Approved Projects (Baseline) Condition Intersection Level of Service Summary

		Ex	sisting Plus Approve	d Condit	tion		
		AM Peak Ho	ur	PM Peak Ho	ur	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.970	Е	1.026	F	0.720	С
2 Rocklin Road/Granite Drive	Signalized	0.532	А	0.929	Е	0.672	В
3 Rocklin Road/I-80 Westbound Ramps	Signalized	23.2 sec	С	38.9 sec	D	25.9 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	32.5 sec	С	45.2 sec	D	16.1 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.433	А	0.499	А	0.320	А
6 Dominguez Road/Granite Drive ¹	Unsignalized	12.6 sec	В	15.4 sec	В	13.3 sec	В
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.854	D	1.091	F	0.732	С
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.626	В	0.847	D	0.597	А
9 Sierra College Boulevard/Granite Drive	Signalized	0.798	С	1.027	F	0.951	Е
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	9.0 sec	А	8.2 sec	А	6.0 sec	А
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	13.0 sec	В	22.4 sec	С	24.6 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.256	А	0.467	А	0.410	А
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.854	D	1.150	F	1.018	F
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.813	D	0.956	Е	0.713	С
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	20.1 sec	С	21.7 sec	С	22.4 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹ (Loomis)	Unsignalized	16.5 sec	С	16.2 sec	С	12.4 sec	В
17 Barton Road/Brace Road ¹ (Loomis)	Unsignalized	16.7 sec	С	16.3 sec	С	10.0 sec	А
18 Barton Road/Rocklin Road ¹ (Loomis)	Unsignalized	16.7 sec	С	12.3 sec	В	11.5 sec	В
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.536	А	0.716	С	0.526	А
20 Sierra College Boulevard/English Colony Way ¹ (Placer County)	Unsignalized	11.7 sec	В	16.0 sec	С	12.4 sec	В
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.791	С	0.763	С	0.553	А
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

Exceeds level of service criteria

Table I: Existing Plus Approved Projects (Baseline) Daily Roadway Segment Level of Service Summary

Roadway	Forment	Configuration	Consister		Weekday			Saturday	
Koadway	Segment	Configuration	Capacity	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	Two-lane Collector	15,000	18,425	1.23	F	12,980	0.87	D
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	12,033	0.80	D	5,145	0.34	А
	Sierra College Boulevard and City Limits ¹ (Loomis)	Two-lane Collector	15,000	12,328	0.82	D	6,750	0.45	А
Pacific Street	City Limits and Dominguez Road ¹	Two-lane Collector	15,000	12,238	0.82	D	6,670	0.44	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	16,554	0.55	А	7,755	0.26	А
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	25,076	0.84	D	14,745	0.49	А
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	15,809	0.53	А	19,055	0.64	В
	Sierra College Boulevard and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	6,861	0.46	А	6,000	0.40	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	3,589	0.24	А	2,330	0.16	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	6,191	0.41	А	6,570	0.44	А
Brace Road	I-80 and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	4,466	0.30	А	2,520	0.17	А
	I-80 and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	4,298	0.29	А	1,660	0.11	А
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	Two-lane Collector	15,000	14,060	0.94	Е	11,300	0.75	С
	King Road and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	14,615	0.97	Е	11,430	0.76	С
	Taylor Road and I-80	Two-lane Collector	15,000	23,606	1.57	F	15,500	1.03	F
	I-80 and Dominguez Road	Four-lane Undivided Arterial	30,000	22,055	0.74	С	20,650	0.69	В
	Dominguez Road and Rocklin Road ¹	Two-lane Collector	15,000	21,985	1.47	F	21,165	1.41	F
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	Four-lane Undivided Arterial	30,000	8,758	0.29	А	7,640	0.25	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	10,403	0.35	А	10,285	0.34	А
Dominguez Road	Taylor Road and Granite Drive ¹	Two-lane Collector	15,000	2,787	0.19	А	1,105	0.07	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	6,010	0.40	А	3,830	0.26	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Taylor Road	Segment King Rd and Horseshoe Bar Rd (Loomis)	Capacity	Exist Volume	ing + Appr V/C	oved LOS	Existing + Volume	- Approved V/C	l + Project LOS
	A.M. Peak Hour Northbound	1,650	710	0.43	A	720	0.44	A
	A.M. Peak Hour Southbound Total A.M. Peak Hour	1,650 3,300	851 1,561	0.52 0.47	A A	867 1,587	0.53 0.48	A A
		5,500	1,301	0.47	A	1,387	0.48	A
	P.M Peak Hour Northbound P.M Peak Hour Southbound	1,650 1,650	1,126 893	0.68 0.54	B A	1,186 949	0.72 0.58	C A
	Total P.M. Peak Hour	3,300	2,019	0.61	B	2,135	0.65	B
	SAT Peak Hour Northbound	1,650	690	0.42	А	765	0.46	A
	SAT Peak Hour Southbound Total SAT Peak Hour	1,650 3,300	701 1,391	0.42	A A	783 1,548	0.47 0.47	A A
		3,300	1,391	0.42	Л	1,540	0.47	А
Faylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)							
	A.M. Peak Hour Northbound A.M. Peak Hour Southbound	1,650 1,650	362 460	0.22	A A	373 468	0.23	A A
	Total A.M. Peak Hour	3,300	822	0.28	A	841	0.28	A
	P.M Peak Hour Northbound	1,650	656	0.40	А	744	0.45	A
	P.M Peak Hour Southbound	1,650	580	0.35	Α	662	0.40	А
	Total P.M. Peak Hour	3,300	1,236	0.37	A	1,406	0.43	A
	SAT Peak Hour Northbound SAT Peak Hour Southbound	1,650 1,650	522 503	0.32	A A	606 595	0.37 0.36	A A
	Total SAT Peak Hour	3,300	1,025	0.30	A	1,201	0.36	A
Faylor Road	Sierra College Blvd and City Limits (Loomis)							
		1 (50	207	0.20		220	0.20	
	A.M. Peak Hour Northbound A.M. Peak Hour Southbound	1,650 1,650	327 568	0.20	A A	329 569	0.20	A A
	Total A.M. Peak Hour	3,300	895	0.27	A	898	0.27	A
	P.M Peak Hour Northbound	1,650	590	0.36	A	599	0.36	A
	P.M Peak Hour Southbound Total P.M. Peak Hour	1,650 3,300	534 1,124	0.32	A A	544 1,143	0.33	A A
		,	,			,		
	SAT Peak Hour Northbound SAT Peak Hour Southbound	1,650 1,650	316 334	0.19 0.20	A A	330 347	0.20	A A
	Total SAT Peak Hour	3,300	650	0.20	А	677	0.21	Α
Pacific Street	City Limits and Dominguez Rd							
	A.M. Peak Hour Northbound	1,650	422	0.26	А	425	0.26	A
	A.M. Peak Hour Southbound	1,650	433	0.26	A	434	0.26	A
	Total A.M. Peak Hour	3,300	855	0.26	A	859	0.26	A
	P.M Peak Hour Northbound P.M Peak Hour Southbound	1,650 1,650	516 541	0.31	A A	523 549	0.32	A A
	Total P.M. Peak Hour	3,300	1,057	0.33	A	1,072	0.33	A
	SAT Peak Hour Northbound	1,650	337	0.20	А	348	0.21	A
	SAT Peak Hour Southbound	1,650	305 642	0.18 0.19	A A	315 663	0.19	A
	Total SAT Peak Hour	3,300	042	0.19	A	003	0.20	A
Sierra College Boulevard	English Colony Way and King Rd (Placer County)							
	A.M. Peak Hour Northbound	1,650	340	0.21	A	352	0.21	A
	A.M. Peak Hour Southbound Total A.M. Peak Hour	1,650 3,300	686 1,026	0.42 0.31	A A	705 1,057	0.43 0.32	A A
	P.M Peak Hour Northbound	1,650	841	0.51	А	908	0.55	А
	P.M Peak Hour Southbound	1,650	565	0.34	Α	627	0.38	Α
	Total P.M. Peak Hour	3,300	1,406	0.43	A	1,535	0.47	A
	SAT Peak Hour Northbound	1,650	553	0.34	A	637	0.39	A
	SAT Peak Hour Southbound Total SAT Peak Hour	1,650 3,300	577 1,130	0.35	A A	669 1,306	0.41 0.40	A A
Sierra College Boulevard	King Rd and Taylor Rd (Loomis)							
Siena Conege Boulevaru								
	A.M. Peak Hour Northbound A.M. Peak Hour Southbound	1,650 1,650	413 739	0.25	A A	425 757	0.26	A A
	Total A.M. Peak Hour	3,300	1,152	0.35	А	1,182	0.36	Α
	P.M Peak Hour Northbound	1,650	959	0.58	A	1,026	0.62	В
	P.M Peak Hour Southbound Total P.M. Peak Hour	1,650 3,300	661 1,620	0.40	A A	723 1,749	0.44 0.53	A A
		,	,			,		
	SAT Peak Hour Northbound SAT Peak Hour Southbound	1,650 1,650	589 574	0.36	A A	674 666	0.41 0.40	A A
	Total SAT Peak Hour	3,300	1,163	0.35	A	1,340	0.41	A
Sierra College Boulevard	Taylor Rd and I-80							
	A.M. Peak Hour Northbound	1,650	564	0.34	А	607	0.37	А
	A.M. Peak Hour Southbound	1,650	798	0.48	Α	866	0.52	А
	Total A.M. Peak Hour	3,300	1,362	0.41	A	1,473	0.45	Α
	P.M Peak Hour Northbound	1,650	1,009	0.61	В	1,260	0.76	C
	P.M Peak Hour Southbound Total P.M. Peak Hour	1,650 3,300	928 1,937	0.56 0.59	A A	1,159 2,419	0.70	C C
	SAT Peak Hour Northbound	1,650	763	0.46	А	1,079	0.65	В
	SAT Peak Hour Northbound SAT Peak Hour Southbound	1,650	788	0.46	A	1,079	0.65	B
	Total SAT Peak Hour	3,300	1,551	0.47	A	2,209	0.67	В
Sierra College Boulevard	Dominguez Rd and Rocklin Rd							
	A.M. Peak Hour Northbound	1,650	747	0.45	A	790	0.48	A
	A M. D. I. H. C. athle and	1,650	994 1,741	0.60 0.53	A A	1,021 1,811	0.62 0.55	BA
	A.M. Peak Hour Southbound Total A M. Peak Hour	4 41 11 1		0.33	А	1,011	0.33	A
	Total A.M. Peak Hour	3,300						
	Total A.M. Peak Hour P.M Peak Hour Northbound	1,650	1,246	0.76	C	1,393	0.84	D
	Total A.M. Peak Hour			0.76 0.68 0.72	C B C	1,393 1,282 2,675	0.84 0.78 0.81	D C D
	Total A.M. Peak Hour P.M Peak Hour Northbound P.M Peak Hour Southbound Total P.M. Peak Hour	1,650 1,650 3,300	1,246 1,122 2,368	0.68 0.72	B C	1,282 2,675	0.78 0.81	C D
	Total A.M. Peak Hour P.M Peak Hour Northbound P.M Peak Hour Southbound	1,650 1,650	1,246 1,122	0.68	В	1,282	0.78	С

Notes: Exceeds level of service criteria Significant Impact

EXISTING PLUS APPROVED PROJECTS (BASELINE) PLUS PROJECT

Existing Plus Approved Projects (Baseline) Plus Project Levels of Service

Traffic volumes generated by the proposed project were added to the existing plus approved projects (baseline) traffic volumes, and LOS were calculated for the existing plus approved projects (baseline) plus project scenario. The existing plus approved projects (baseline) plus project weekday and Saturday peak-hour traffic volumes are illustrated in Figures 15 and 16. The LOS for study area intersections and roadway segments in the existing plus approved projects plus project scenario are shown in Tables K and L. The existing plus approved projects plus project LOS worksheets are provided in Appendix F. The LOS for the existing plus approved projects (baseline) plus project condition assumes the reconstruction of the I-80/Sierra College Boulevard interchange (Figure 11), as the interchange improvements have CEQA approval and are fully funded and currently under construction.

As shown in Table K, the following seven intersections are forecast to operate at unsatisfactory LOS in the existing plus approved projects (baseline) plus project scenario:

- Rocklin Road/Pacific Street
- Rocklin Road/Granite Drive
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Brace Road (Loomis)
- Sierra College Boulevard/Granite Drive
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)

Except for the intersection of Rocklin Road/Pacific Street, all the above intersections are significantly impacted in the existing plus approved projects (baseline) plus project scenario. As shown in Table L, most of the study area roadway segments are forecast to operate within their daily roadway capacities except for the following eight roadway segments:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Pacific Street between City Limits and Dominguez Road
- Sierra College Boulevard between English Colony Way and King Road (Placer County)
- Sierra College Boulevard between King Road and Taylor Road (Loomis)
- Sierra College Boulevard between Taylor Road and I-80
- Sierra College Boulevard between Dominguez Road and Rocklin Road

N	tanalain talann in	$\begin{array}{c} 104/237\\ \leftarrow 104/237\\ \leftarrow 71/148\\ \hline 104/237\\ \leftarrow 71/148\\ \hline 2/34 & \neg \\ 22/34 & \neg \\ 153/113 & \neg \\ 43/23 & \neg \\ \end{array}$	$\begin{array}{c} 1000 \\ 10$	82 92 1 2/ 2/ 2/ 2/ 2 2/ 5 4 5 4 5 462/591 2
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
et and the second secon		L 49 / 121 ← 745 / 1355 223 / 247 ① ← 745 / 1355 651 / 692 → 029 / 22 8 651 / 692 → 029 / 22 8 4 I-80 EB Ramp/Rocklin Rd	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	33 33 53
		$\begin{array}{c} 525 \\$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 901 \\ 1 \\ 1 \\ 28 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 $
		7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
NORTH Legend Study Area 12 Future Inte Future Roy	ersection	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9000000000000000000000000000000000000	L2711/258 ↓
$\begin{array}{c} 227 \ 106 \ / \ 152 \ 206 \ / \ 114 \ / \ 216 \ 206 \$	$\begin{array}{c} 01 \\ 02 \\ 01 \\ 01 \\ 01 \\ 01 \\ 01 \\ 01 \\$	72 / 10 72 / 00 72 / 00 7	 248/260 248/260 105/103 357/367 → ↑ 105/103 50/50 ↓ 99/85 50/50 ↓ 105/103 	← 120 / 86 ↓ 106 / 115 84 / 86 → ↓ ↑ ↑ 130 / 170 ↓ 29 / 29 81 / 81
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
282/278 ♪ 56/71 → 56/71 →	$\begin{array}{c} 7/1 \\ 7/2 \\$	$\begin{array}{c c} & \leftarrow & 594/532 \\ \hline & \bigcirc & 71/47 \\ 335/777 \rightarrow & \frown & \frown \\ & & 1/4 \\ & & & 1/4 \\ & & & 25/26 \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	167 / 475 → ← 291 / 325 21 / 72 → 99 21 / 72 → 99
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 15

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Existing Plus Approved Projects (Baseline) Plus Project Peak Hour Traffic Volumes

J.	emailer kalent w	$\begin{array}{c} 135\\ \leftarrow 135\\ \leftarrow 48\\ \downarrow \\ \downarrow \\ 22\\ 56\\ 56\\ 22\\ 1 \\ 56\\ 22\\ 1 \\ 56\\ 22\\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	$\begin{array}{c} 1 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
at the second se			5 Dominguez Rd/Pacific St	$ \begin{array}{c} 15 \\ 17 \\ 17 \\ 19 \\ 19 \\ 19 \\ 19 \\ 19 \\ 19 \\ 19 \\ 19$
		$\begin{array}{c} 24\\ 5\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\ 2\\$	$000 \rightarrow 11 \rightarrow 14$ $14 \rightarrow 14 \rightarrow 651$ 888	215 1 108 215 1 108 215 1 108 215 1 108 218 1 108 218 1 108 218 1 108
	V I	7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
NORTH Legend O Study Area 12 Future Inte Future Roa	rsection	$\begin{array}{c} 1 \\ 8 \\ 8 \\ 2 \\ 279 \\ 279 \\ 581 \\ 7 \\ 281$	$\begin{array}{c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$	131 → ↓ ↓ ↓ 115 - 175 - 188 - 198 - 198
		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 188\\ 67\\ 68\\ 67\\ 7\end{array} \xrightarrow{\frown} 188\\ 68\\ 68\\ 7\end{array} \xrightarrow{\frown} 188\\ 68\\ 68\\ 7\end{array} \xrightarrow{\frown} 188\\ 68\\ 7\\ 7\\ 167\\ 7\end{array} \xrightarrow{\frown} 48\\ 7\\ 167\\ 7\end{array} \xrightarrow{\frown} 88\\ 285\\ 7\end{array}$	$\begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & &$	$\begin{array}{c} 111 \\ 1111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 $	275 - 277 - 275 - 35 - 35	← 96
I 13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
324 → 42 324 → 43	$\begin{array}{c} & & \uparrow & 67 \\ & & & 009 \\ & \downarrow & \downarrow & \downarrow & \downarrow & 538 \\ \hline & \downarrow & \downarrow & \downarrow & \downarrow & 538 \\ \hline & & 2 & \uparrow & \uparrow & \uparrow & \uparrow \\ & 14 & \rightarrow & 988 \\ & & 14 & \rightarrow \\ & & 8 & \neg \end{array}$	69 28 4 1 28 5 28 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	$\begin{array}{c} 176\\ \hline 175\\ \hline 175\\ \hline 175\\ \hline 175\\ \hline 175\\ \hline 176\\ \hline 17$	382 → 105 → 133
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Sierra College Blvd/Black Willow St
				FIGURE 16

Saturday Peak Hour Volume Existing Plus Approved Projects (Baseline) Plus Project Saturday Peak Hour Traffic Volumes

1234

Table K: Existing Plus Approved Projects (Baseline) Plus Project Condition Intersection Level of Service Summary

			Existing Plus Approved Condition				Existing	Plus Approved Plus	Project (Condition			
		AM Peak Ho	ur	PM Peak Ho	ur	Saturday		AM Peak Ho	ur	PM Peak Ho	ur	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.970	Е	1.026	F	0.720	С	0.976	E^2	1.051	F^2	0.753	С
2 Rocklin Road/Granite Drive	Signalized	0.532	Α	0.929	Е	0.672	В	0.540	Α	0.985	Е	0.717	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	23.2 sec	С	38.9 sec	D	25.9 sec	С	23.3 sec	С	40.6 sec	D	26.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	32.5 sec	С	45.2 sec	D	16.1 sec	В	32.7 sec	С	46.4 sec	D	16.4 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.433	А	0.499	Α	0.320	А	0.436	Α	0.504	А	0.336	Α
6 Dominguez Road/Granite Drive ¹	Unsignalized	12.6 sec	в	15.4 sec	в	13.3 sec	В	12.9 sec	в	17.6 sec	С	15.2 sec	В
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.854	D	1.091	F	0.732	С	0.888	D	1.211	F	0.891	D
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.626	В	0.847	D	0.597	А	0.677	В	1.029	F	0.832	D
9 Sierra College Boulevard/Granite Drive	Signalized	0.798	С	1.027	F	0.951	Е	0.852	D	1.206	F	1.218	F
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	9.0 sec	А	8.2 sec	А	6.0 sec	А	15.5 sec	В	28.5 sec	С	34.3 sec	С
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	13.0 sec	В	22.4 sec	С	24.6 sec	С	14.7 sec	В	25.3 sec	С	39.7 sec	D
12 Sierra College Boulevard/Dominguez Road	-	0.256	А	0.467	Α	0.410	А	0.262	Α	0.517	Α	0.482	Α
13 Sierra College Boulevard/Rocklin Road 1	Signalized	0.854	D	1.150	F	1.018	F	0.873	D^2	1.234	F	1.135	F
14 Horseshoe Bar Road/Taylor Road 1 (Loomis)	Signalized	0.813	D	0.956	Е	0.713	С	0.824	D^2	1.008	F	0.783	С
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	20.1 sec	С	21.7 sec	С	22.4 sec	С	20.1 sec	С	21.7 sec	С	22.4 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹ (Loomis)	Unsignalized	16.5 sec	С	16.2 sec	С	12.4 sec	В	16.7 sec	С	16.7 sec	С	12.8 sec	В
17 Barton Road/Brace Road ¹ (Loomis)	Unsignalized	16.7 sec	С	16.3 sec	С	10.0 sec	А	17.1 sec	С	17.8 sec	С	10.5 sec	В
18 Barton Road/Rocklin Road 1 (Loomis)	Unsignalized	16.7 sec	С	12.3 sec	В	11.5 sec	В	17.4 sec	С	13.4 sec	В	12.7 sec	В
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.536	А	0.716	С	0.526	А	0.551	А	0.765	С	0.590	А
20 Sierra College Boulevard/English Colony Way ¹ (Placer County)	Unsignalized	11.7 sec	В	16.0 sec	С	12.4 sec	В	11.8 sec	В	17.5 sec	С	13.6 sec	В
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.791	С	0.763	С	0.553	А	0.800	С	0.785	С	0.616	В
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-	0.108	А	0.200	А	0.193	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Project impact is less than 5% of total intersection V/C or delay and therefore not a significant impact.

Exceeds level of service criteria

(Shade) = Significant Impact

Table L: Existing Plus Approved Projects (Baseline) Plus Project - Daily Roadway Segment Level of Service Summary

					Existing Plus Approved					Existing	Plus Appr	oved Plus l	Project		
Roadway	Segment	Configuration	Capacity	١	Veekday			Saturday		1	Weekday			Saturday	
				Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	Two-lane Collector	15,000	18,425	1.23	F	12,980	0.87	D	19,575	1.31	F	14,550	0.97	E
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	12,033	0.80	D	5,145	0.34	А	13,523	0.90	Е	7,180	0.48	А
	Sierra College Boulevard and City Limits ¹ (Loomis)	Two-lane Collector	15,000	12,328	0.82	D	6,750	0.45	А	12,528	0.84	D	7,020	0.47	А
Pacific Street	City Limits and Dominguez Road ¹	Two-lane Collector	15,000	12,238	0.82	D	6,670	0.44	А	12,378	0.83	D	6,870	0.46	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	16,554	0.55	А	7,755	0.26	А	16,674	0.56	А	7,915	0.26	А
Rocklin Road	Pacific Street and Granite Drive	Four-lane Undivided Arterial	30,000	25,076	0.84	D	14,745	0.49	А	25,366	0.85	D	15,675	0.52	Α
	I-80 and Sierra College Boulevard	Four-lane Undivided Arterial	30,000	15,809	0.53	Α	19,055	0.64	В	15,969	0.53	Α	19,270	0.64	В
	Sierra College Boulevard and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	6,861	0.46	А	6,000	0.40	А	7,861	0.52	А	7,380	0.49	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	3,589	0.24	А	2,330	0.16	А	3,659	0.24	А	2,425	0.16	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	Two-lane Collector	15,000	6,191	0.41	А	6,570	0.44	А	6,481	0.43	А	6,960	0.46	А
Brace Road	I-80 and Barton Road ¹ (Loomis)	Two-lane Collector	15,000	4,466	0.30	А	2,520	0.17	А	4,896	0.33	А	3,100	0.21	Α
	I-80 and Sierra College Boulevard ¹ (Loomis)	Two-lane Collector	15,000	4,298	0.29	А	1,660	0.11	А	5,918	0.39	А	3,870	0.26	Α
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	Two-lane Collector	15,000	14,060	0.94	Е	11,300	0.75	С	15,350	1.02	F	13,070	0.87	D
	King Road and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	14,615	0.97	Е	11,430	0.76	С	15,905	1.06	F	13,200	0.88	D
	Taylor Road and I-80	Two-lane Collector	15,000	23,606	1.57	F	15,500	1.03	F	28,416	1.89	F	22,060	1.47	F
	I-80 and Dominguez Road	Four-lane Undivided Arterial	30,000	22,055	0.74	С	20,650	0.69	В	25,650	0.85	D	25,550	0.85	D
	Dominguez Road and Rocklin Road ¹	Two-lane Collector	15,000	21,985	1.47	F	21,165	1.41	F	24,950	1.66	F	25,210	1.68	F
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	Four-lane Undivided Arterial	30,000	8,758	0.29	А	7,640	0.25	А	9,618	0.32	А	8,780	0.29	А
	Dominguez Road and Rocklin Road ¹	Four-lane Undivided Arterial	30,000	10,403	0.35	Α	10,285	0.34	А	11,183	0.37	Α	11,350	0.38	А
Dominguez Road	Taylor Road and Granite Drive ¹	Two-lane Collector	15,000	2,787	0.19	Α	1,105	0.07	А	2,922	0.19	Α	1,280	0.09	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	Two-lane Collector	15,000	6,010	0.40	А	3,830	0.26	А	6,010	0.40	А	3,830	0.26	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Similar to the previous scenarios, these segments will exceed the threshold of daily capacity in the existing plus approved projects (baseline) plus project scenario. In both the a.m. and p.m. peak hours, seven of the eight roadway segments are forecast to operate with satisfactory v/c ratios in both peak hours with project conditions, as shown in Table J. Therefore, the project does not cause a significant impact on those seven roadway segments. However, southbound Sierra College Boulevard between Dominguez Road and Rocklin Road is expected to operate at LOS D in the p.m. peak hour if the proposed project and other approved projects were constructed while this roadway is a two-lane collector. The City has completed preliminary design for the widening of Sierra College Boulevard to four lanes between I-80 and El Don Drive, and this project is included in the City's Capital Improvement Projects list. The project is broken into two phases – Phase I south of the interchange to El Don Drive and Phase II north of the interchange from Granite Drive to Taylor Road. The City is proposing to bid the project in February 2009, with construction on Phase I beginning in April 2009. City staff indicated that the Phase I portion of the project is fully funded, and staff anticipates three to four month construction duration for Phase I. Even though the Phase 2 is included in the Town of Loomis' Capital Improvement Program it is not funded. Per City of Rocklin staff, funding for Phase 2 has only been secured for design which is currently underway. Funding for construction has not been secured and has several hurdles to overcome before the construction money can be approved by the South Placer Regional Transportation Authority (SPRTA) Board.

Recommended Mitigation: Existing Plus Approved Projects (Baseline) Plus Project

Rocklin Road/Granite Drive. The project would add traffic to this already-deficient location, which is operating at LOS E during the p.m. peak hour in the existing plus approved projects condition. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact.

Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS D during the a.m. peak hour and LOS F during the p.m. peak hour in the existing plus approved projects condition. The project also degrades the LOS at this intersection from LOS C to LOS E during the Saturday peak hour. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Sierra College Boulevard/Brace Road (Loomis). The proposed project degrades traffic operations to unacceptable LOS during the p.m. peak hour and Saturday peak hour. Adding a second through lane in the northbound and southbound direction would mitigate this impact. Widening of Sierra

College Boulevard is a partially funded project in the vicinity of the intersection with Brace Road and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis and is not yet funded. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Sierra College Boulevard/Granite Drive. The proposed project contributes to deficiencies in LOS during both the p.m. and Saturday peak hours. Adding a second through lane in the northbound and southbound direction would mitigate this impact. The southbound through lane can be implemented with restriping of existing pavement only. The existing "right turn only" lane would be converted to a shared "through/right turn" lane and there is existing improvement on the south side of the intersection to accept the second through lane.

The second northbound through lane can be implemented within existing pavement on the south side of the intersection. On the north side there is sufficient pavement for about 300 feet, however, there is not sufficient pavement for a transition from two lanes to one. This would require at least 300 feet of additional improvement.

Currently the City has jurisdiction over the south leg and only approximately 300 feet on the north leg along Sierra College Boulevard. Town of Loomis has jurisdiction north of that. Because the Town of Loomis' approval is required to implement this improvement, and because the City uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEOA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation. The widening of Sierra College Boulevard to construct two through lanes in each direction is a partially funded project in the vicinity of the intersection with Granite Drive and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis and is not yet fully funded.

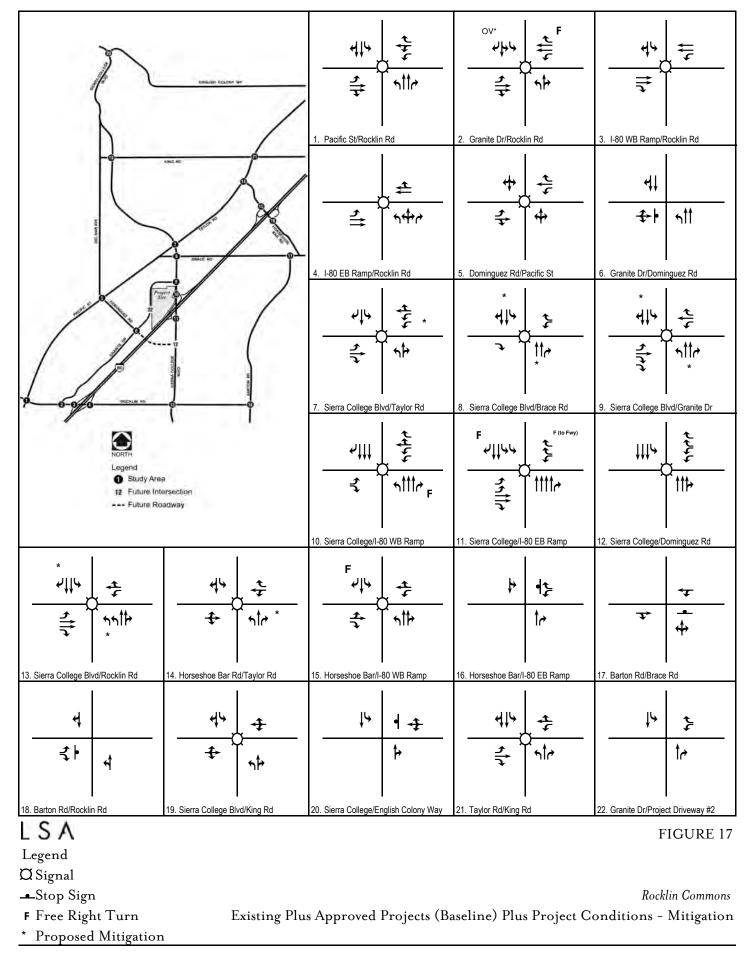
Sierra College Boulevard/Rocklin Road. The project would add traffic to this already-deficient location, which is operating at LOS F during the p.m. and Saturday peak hours in the existing plus approved projects condition. Adding a northbound left-turn lane (resulting in dual left-turn lanes) and

an exclusive southbound right-turn lane would mitigate the project impact at this location. There is an approved, not-yet-built project that is obligated to improve this intersection which includes construction of a second northbound left-turn lane and an exclusive southbound right-turn lane, and if that project completes this improvement prior to the proposed project, then this project (Rocklin Commons) will not have any obligations.

Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location which is operating at LOS E during the p.m. peak hour in the existing plus approved projects (baseline) condition. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and** unavoidable, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

The proposed mitigations for the existing plus approved projects (baseline) plus project are shown in Figure 17. Proposed new features or proposed changes to the phasing of improvements can be identified by comparing the diagrams in Figure 17 to the corresponding diagrams found in Figure 4 (Existing Geometrics and Traffic Control).

The Sierra College Boulevard segment between Dominguez Road and Rocklin Road is projected to operate at unacceptable level of service (LOS D) in the Existing plus Approved plus Project scenario for the p.m. peak hour. Adding a second through lane in the northbound and southbound direction would mitigate this impact. The widening of Sierra College Boulevard is a partially funded project in the vicinity of the intersection with Granite Drive and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis. Even though the Phase 2 is included in the Town of Loomis' Capital Improvement Program it is not fully funded. Per City of Rocklin staff, funding for Phase 2 has only been secured for design which is currently underway. Funding for construction has not been secured and has several hurdles to overcome before the construction money can be approved by SPRTA Board. The project applicant should participate in this improvement by paying the traffic impact fee.



CUMULATIVE (YEAR 2025) CONDITIONS

Development of Future Traffic Volumes

Traffic volume data for 2025 conditions were developed using forecasts from the City traffic model. The traffic model is based on the land use and circulation system shown in the City's General Plan. The assumptions for the land use and circulation system included in the traffic model are consistent with the land use and circulation policy of the City. Funding for these future circulation improvements will come from several sources such as anticipated fee programs and/or development exactions that are needed for land uses proposed in the General Plan, City CIP program, City development fees, SPRTA program, and other applicable funding programs. The 2025 projected volume for this analysis is based on the City of Rocklin General Plan and Town of Loomis General Plan and includes assumptions about 2025 levels of build out under each General Plan. The future 2025 analysis is based on traffic volumes that were generated based on the General Plan traffic model. The General Plan traffic model takes into account the anticipated traffic growth based on new development in the region (including Lincoln, Roseville, Penryn, Loomis, Rocklin, and unincorporated Placer County). The General Plan traffic model is a detailed version (within Rocklin and surrounding areas) of the Placer County Travel Demand Model. The City retains a traffic consultant (DKS Associates, Inc.), which maintains a traffic model for the region (including Town of Loomis). This traffic model is validated (verified for accuracy of the forecasted volumes) for a base year (2001) and a future year (2025) for p.m. peak hour only. These base year and future year models were obtained from the City's traffic consultant. Base year and future year p.m. peak-hour arterial segment volumes were forecast using the City's model. The base year and future models are only used to obtain the growth increment between 2001 and 2025. This growth is then added to the existing (2006) turning movement counts to generate the future 2025 turning movement volumes. Turn movements for the p.m. peak hour were postprocessed according to the methodology described below

Intersection Turning Movements

For passenger vehicles, the base-year scenario in the City's traffic model is 2001 and the future-year scenario is 2025. The following describes the methodology used to postprocess traffic model volumes to develop a.m. and p.m. peak-hour intersection turn volumes for 2025 conditions:

- 1. The difference between the modeled 2001 and 2025 peak-hour directional arterial traffic volumes (for each intersection approach and departure) was identified from loaded highway network plots. This difference defines growth in traffic over the 24-year period. The incremental growth in peak-period approach and departure volumes between 2001 and 2025 was factored to develop the incremental change in peak-hour volumes.
- 2. The forecast growth in approach (toward the intersection) and departure (away from the intersection) volumes at an intersection from 2006 (existing) to future year 2025 was added to the existing approach and departure volumes, resulting in postprocessed forecast year 2025 approach and departure volumes. Volume development worksheets summarizing the steps are included in Appendix G.
- 3. Forecast year 2025 turn volumes were developed using existing turn volumes and the future approach and departure volumes, based on the methodologies contained in the National Cooperative Highway Research Program Report (NCHRP) 255: *Highway Traffic Data for*

Urbanized Area Project Planning and Design (Transportation Research Board, December 1982). NCHRP 255 worksheets are included in Appendix G.

The City's current traffic model is not validated (verified for the accuracy of forecasted volumes) for the a.m. peak hour and does not have forecasting capability for the Saturday peak hour. To validate the 2025 model a.m. peak-hour traffic volumes, the existing a.m. peak-hour traffic volumes were compared to the existing p.m. peak-hour traffic volumes, and ratios between existing a.m. and p.m. peak volume were calculated. In order to maintain the peak directionality these ratios were then applied to the 2025 a.m. peak model numbers. These adjusted 2025 a.m. peak directional arterial traffic volumes were then used in the methodology described above in Step 1 to obtain the growth in traffic during the a.m. peak hour. Similarly, to develop future intersection turn movements for the Saturday peak hours, the ratios of the existing p.m. peak to Saturday peak hours were used. These ratios were applied to the postprocessed year 2025 no project p.m. peak-hour traffic volumes to determine the 2025 no project Saturday peak-hour traffic volumes. Project trips were then manually added to the study area intersections to determine the 2025 plus project traffic volumes. Year 2025 traffic volumes were forecast for two roadway networks. The network used for project impact analysis assumes that Dominguez Road terminates at Granite Drive, as in the existing condition, and is referred to as "without Dominguez Road." The alternative network assumes that Dominguez Road is extended east to Sierra College Boulevard. This alternative network is referred to as "with Dominguez Road" and is intended to provide a sensitivity analysis of the effects of extending Dominguez Road. The Dominguez Road extension is in the City's Traffic Impact Fee and CIP and is included in the City's current General Plan, although no schedule exists for construction of the new segment. The analysis of "with Dominguez Road" conditions is provided in the Special Issues section.

2025 No Project Without Dominguez Road

Weekday and Saturday peak-hour forecast traffic volumes for the 2025 no project Without Dominguez Road scenario are shown in Figures 18 and 19. The LOS for study area intersections and roadway segments are shown in Tables M and N. The 2025 no project Without Dominguez Road traffic volume development and LOS worksheets are provided in Appendix G. All 2025 LOS include the roadway improvements assumed in the baseline condition as well as implementation of the City's General Plan roadway system, as documented in the City General Plan Circulation Element. Consistent with the City's General Plan, Town of Loomis General Plan and Horseshoe Bar/Penryn Community Plans, the traffic analysis for the cumulative conditions (2025) assumes that Sierra College Road would be widened to a four-lane arterial between English Colony Way and just north of Taylor Road and to a six-lane arterial between just north of Taylor Road and El Don Drive. The LOS also includes the following improvements to the intersection of Sierra College Boulevard/Rocklin Road, which is planned as part of an approved project (Sierra College Center): (1) Northbound – addition of a second left, a third through, and an exclusive right-turn lane; (2) Southbound – addition of a second left-turn lane, a third through-lane, and exclusive right-turn lane; (3) Westbound – addition of a second left-turn lane and a second through lane; and (4) Eastbound – addition of a second left-turn lane. The 2025 intersection geometrics and traffic control are shown in Figure 20.

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18 Barton Rd/Rocklin Rd 19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 18

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Year 2025 No Project Peak Hour Traffic Volumes - Without Dominguez Road

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Bet interest		<u>↑</u> 272 ← 645 308 ♪ ↑ ↑ 1820 → २ ₽	$\begin{array}{c} 11\\ 8\\ 8\\ 42 \end{array} 12\\ 42 \end{array} 28\\ 42 12\\ 521 8\\ 20 \end{array} 20 \end{array}$	22 21 5 415 302 → 15 15 15 15 15 15 15 15 15 15
		4 I-80 EB Ramp/Rocklin Rd	5 Dominguez Rd/Pacific St	6 Granite Dr/Dominguez Rd
		$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	14 ← 740 14 ← 740 7 → 116 27 → 92 ← 7 601 →	$\begin{array}{c} 26 \\ 20 \\ -26 \\ -27 \\ -27 \\ -27 \\ -27 \\ -27 \\ -28 \\ -$
	I = I	7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
NORTH Legend 1 Study Are 12 Future Int Future Ro	ersection	1128 723 ↓ ↑ 723 ↓ 1288	87 58 88 1 249 279 1 57 350 279 1 ↑ ↑ ↑ 555 → 267 58 125 ↓	1252 → 1131 1252 → 0752 → 1133 343 J H 31 1252
		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	$\begin{array}{c} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	$\begin{array}{c} 100\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10$	99 93 93 93 1 ↓ ↓ 93 1 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	← 210
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
887 22 ↓ ↓ 255 ♪ ↑ ↑ 417 ↓ £2 255	$\begin{array}{c} 115\\ 9\\ 13\\ 13\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12$	664 585 → ↑ 170 585 → 170 119 ↓ 85 99	109 → 120 101 → 1 ← 120 101 → 1 ← 120 103 → 105 ↔ 100 107 → 105 ↔ 100 107 → 105 ↔ 100	416 → + 576
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 19

1234

Saturday Peak Hour Volume

Rocklin Commons

Year 2025 No Project Saturday Peak Hour Traffic Volumes - Without Dominguez Road

Table M: 2025 No Project without Dominguez Road Condition Peak Hour Intersection Level of Service Summary

		2025 No Project without Dominguez Road Condition								
		AM Peak Ho	our	PM Peak He	our	Saturday				
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS			
1 Rocklin Road/Pacific Street ¹	Signalized	0.771	С	0.820	D	0.590	А			
2 Rocklin Road/Granite Drive	Signalized	0.692	В	0.972	Е	0.700	С			
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.6 sec	С	48.2 sec	D	31.9 sec	С			
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	50.4 sec	D	41.0 sec	D	16.6 sec	В			
5 Dominguez Road/Pacific Street ¹	Signalized	0.599	А	0.778	С	0.430	А			
6 Dominguez Road/Granite Drive ¹	Unsignalized	13.3 sec	В	19.0 sec	С	11.7 sec	В			
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	1.022	F	0.955	Е	0.567	А			
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.586	А	0.737	С	0.339	А			
9 Sierra College Boulevard/Granite Drive	Signalized	0.723	С	0.686	В	0.603	А			
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	11.7 sec	В	10.6 sec	В	6.4 sec	А			
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	14.3 sec	В	19.0 sec	В	24.1 sec	С			
12 Sierra College Boulevard/Dominguez Road	-	0.550	А	0.736	С	0.661	В			
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.899	D	0.802	D	0.509	А			
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.972	Е	0.975	Е	0.713	С			
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.8 sec	С	21.5 sec	С	22.6 sec	С			
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹² (Loomis)	Unsignalized	33.4 sec	D	26.3 sec	D	16.8 sec	С			
17 Barton Road/Brace Road ¹² (Loomis)	Unsignalized	103.2 sec	F	63.4 sec	F	12.4 sec	В			
18 Barton Road/Rocklin Road ¹² (Loomis)	Unsignalized	367.8 sec	F	22.2 sec	С	17.7 sec	С			
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.729	С	0.846	D	0.529	А			
20 Sierra College Boulevard/English Colony Way ¹² (Placer County)	Unsignalized	332.2 sec	F	769.9 sec	F	38.7 sec	Е			
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.984	Е	0.609	В	0.684	В			
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-			

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Peak Hour volumes meet Signal Warrant #3 of the MUTCD

Exceeds level of service criteria

Table N: 2025 No Project Without Dominguez Road Daily Roadway Segment Level of Service Summary

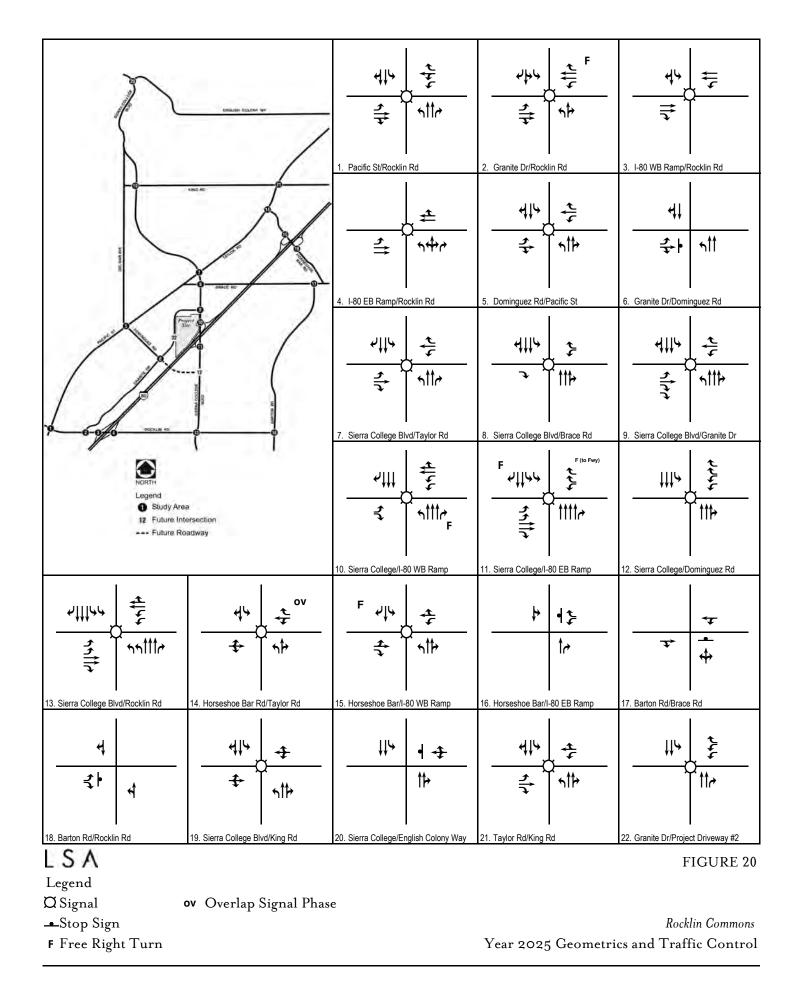
Roadway	Segment	Capacity	Capacity Configuration	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	15,000	Two-lane Collector	19,444	1.30	F
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	14,108	0.94	Е
	Sierra College Boulevard and City Limits ¹ (Loomis)	15,000	Two-lane Collector	17,954	1.20	F
Pacific Street	City Limits and Dominguez Road ¹	30,000	Four-lane Undivided Arterial	18,014	0.60	В
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	22,579	0.75	С
Rocklin Road	Pacific Street and Granite Drive	30,000	Four-lane Undivided Arterial	37,854	1.26	F
	I-80 and Sierra College Boulevard	30,000	Four-lane Undivided Arterial	18,089	0.60	В
	Sierra College Boulevard and Barton Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	14,634	0.49	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	7,066	0.47	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	9,788	0.65	В
Brace Road	I-80 and Barton Road ¹ (Loomis)	15,000	Two-lane Collector	9,654	0.64	В
	I-80 and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	7,846	0.52	А
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	30,000	Four-lane Undivided Arterial	27,005	0.90	Е
	King Road and Taylor Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	22,616	0.75	С
	Taylor Road and I-80	50,525	Six-lane Arterial	32,455	0.64	В
	I-80 and Dominguez Road	50,525	Six-lane Arterial	31,944	0.63	В
	Dominguez Road and Rocklin Road ¹	50,525	Six-lane Arterial	33,802	0.67	В
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	30,000	Four-lane Undivided Arterial	17,659	0.59	А
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	7,403	0.25	А
Dominguez Road	Taylor Road and Granite Drive ¹	15,000	Two-lane Collector	5,221	0.35	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	15,000	Two-lane Collector	7,056	0.47	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan



As shown in Table M, the following 11 intersections are forecast to operate at unsatisfactory LOS in the 2025 No Project Without Dominguez Road condition:

- Rocklin Road/Pacific Street
- Rocklin Road/Granite Drive
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramps (Loomis)
- Barton Road/Brace Road (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/King Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

The results of the roadway analysis, as shown in Table N, indicate that most of the study area roadway segments are forecast to operate within their daily roadway capacities, with the exception of the following five segments:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Rocklin Road between Pacific Street and Granite Drive
- Sierra College Boulevard between English Colony Way and King Road (Placer County)

2025 Plus Project Without Dominguez Road

Traffic volumes generated by the proposed project were added to the 2025 no project traffic volumes, and LOS were calculated for the 2025 plus project scenario. Weekday and Saturday peak-hour forecast traffic volumes for the 2025 plus project Without Dominguez Road scenario are shown in Figures 21 and 22. The LOS for study area intersections and roadway segments in the 2025 plus project Without Dominguez Road scenario are shown in Tables O and P. The 2025 plus project Without Dominguez Road LOS worksheets are provided in Appendix H.

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 Study Area Future Inter 	ersection	<u>ل</u> ↓ ↓ √ 742/520 19/295 ב1 أ⊂ ↑ ↑ ↑	89 10 11 11 11 10 10 10 10 10 10	60011/9681 227/269 → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
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13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
230/29 ♪ 95/104 → 95/104 →			$\begin{array}{c} 52 \\ 86 \\ 76 \\ 76 \\ 76 \\ 76 \\ 76 \\ 76 \\ 76$	252/902 → 21/71 → 55 21/71 → 55 235
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2
				FIGURE 21

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Year 2025 Plus Project Peak Hour Traffic Volumes - Without Dominguez Road

N	Emilien Scalere ive	$\begin{array}{c} 118\\ +2 \\ -1 \\ 128\\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1$	$\begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & & $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
h h	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
Bit in the second			$\begin{array}{c} & \swarrow & 13 \\ & \swarrow & \swarrow & \swarrow & 280 \\ \hline \downarrow & \downarrow & \downarrow & \swarrow & 28 \\ \hline 42 \ \downarrow & \bigcirc & \swarrow & \uparrow & \uparrow \\ \hline 529 \ \rightarrow & \odot & \And & \varUpsilon \\ 21 \ \neg & & & \cr \end{array}$ 5 Dominguez Rd/Pacific St	$ \begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & &$
	E Sundan	276 → 90 90 ₪	996 → ↓ 119 14 → ↓ 191 13 3 ↑ ↑ ↓ 256	26 27 28 28 29 292 292 292 292 292 292 292 29
	v 1	7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
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		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 135 \\ 135 \\ 100 \\ 101 \\ 344 \\ 219 \\ 219 \end{array}$	$\begin{array}{c} 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 $	$\begin{array}{c} 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100\\ 100$	88 ℃ 238 → ↓ ↓ ♥ 93 ↑ ↑ ℃ 26	← 230 ↓ 107 302 → ↑ ↑ 40 ີ ໂຮ ອຼ
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
88 22 ↓↓↓↑↑↑ 255 ♪↑↑ 483 ↑↓ 12	$\begin{array}{c} \begin{array}{c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & $	670 → 119 → 119 → 119 → 126	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	423 → → ← + + + + + + + + + + + + + + + + +
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Granite Dr/Project Driveway #2	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 22
				FIGURE 22

1234

Saturday Peak Hour Volume

Rocklin Commons

Year 2025 Plus Project Saturday Peak Hour Traffic Volumes - Without Dominguez Road

Table O: 2025 Plus Project without Dominguez Road Condition Peak Hour Intersection Level of Service Summary

		20	25 No Pr	oject without Domin	guez Roa	d Condition		202	5 Plus Pr	roject without Domin	guez Ro	ad Condition	
		AM Peak Hour		PM Peak Ho	ur	Saturday		AM Peak Hour		PM Peak Hour		Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.771	С	0.820	D	0.590	А	0.777	С	0.844	D^2	0.623	В
2 Rocklin Road/Granite Drive	Signalized	0.692	В	0.972	Е	0.700	С	0.700	С	1.024	F	0.744	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.6 sec	С	48.2 sec	D	31.9 sec	С	26.7 sec	С	50.0 sec	D	32.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	50.4 sec	D	41.0 sec	D	16.6 sec	В	50.7 sec	D	42.0 sec	D	16.7 sec	В
5 Dominguez Road/Pacific Street 1	Signalized	0.599	Α	0.778	С	0.430	А	0.600	А	0.784	С	0.438	Α
6 Dominguez Road/Granite Drive ¹	Unsignalized	13.3 sec	В	19.0 sec	С	11.7 sec	В	13.6 sec	В	22.3 sec	С	13.0 sec	В
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	1.022	F	0.955	Е	0.567	А	1.048	F^2	1.042	F	0.685	В
8 Sierra College Boulevard/Brace Road 1 (Loomis)	Signalized	0.586	А	0.737	С	0.339	А	0.613	В	0.799	С	0.480	Α
9 Sierra College Boulevard/Granite Drive	Signalized	0.723	С	0.686	В	0.603	Α	0.748	С	0.763	С	0.746	С
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	11.7 sec	В	10.6 sec	В	6.4 sec	Α	12.2 sec	В	50.0 sec	D	48.5 sec	D
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	14.3 sec	В	19.0 sec	В	24.1 sec	С	15.4 sec	В	25.2 sec	С	31.2 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.550	Α	0.736	С	0.661	В	0.563	Α	0.785	С	0.729	С
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.899	D	0.802	D	0.509	А	0.909	E^2	0.822	D^2	0.568	Α
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.972	Е	0.975	Е	0.713	С	0.982	E^2	1.023	F	0.781	D
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.8 sec	С	21.5 sec	С	22.6 sec	С	22.8 sec	С	21.5 sec	С	22.6 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹³ (Loomis)	Unsignalized	33.4 sec	D	26.3 sec	D	16.8 sec	С	34.1 sec	D^2	27.6 sec	D^2	17.5 sec	С
17 Barton Road/Brace Road ¹³ (Loomis)	Unsignalized	103.2 sec	F	63.4 sec	F	12.4 sec	В	109.5 sec	F^2	81.0 sec	F ²	13.4 sec	В
18 Barton Road/Rocklin Road 13 (Loomis)	Unsignalized	367.8 sec	F	22.2 sec	С	17.7 sec	С	407.3 sec	F	28.6 sec	D	24.5 sec	С
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.729	С	0.846	D	0.529	А	0.734	С	0.869	D^2	0.559	А
20 Sierra College Boulevard/English Colony Way 13 (Placer County)	Unsignalized	332.2 sec	F	769.9 sec	F	38.7 sec	Е	354.0 sec	F^2	987.2 sec	F	55.1 sec	F
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.984	Е	0.609	В	0.684	В	0.990	E ²	0.629	В	0.711	С
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-	0.218	А	0.349	А	0.245	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Project impact is less than 5% of total intersection V/C or delay and therefore not a significant impact.

³ Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Exceeds level of service criteria

(Shade) = Significant Impact

Table P: 2025 Without Dominguez Road Daily Roadway Segment Level of Service Summary

				202	5 No Proje	ct	2025 Plus Project		
Roadway	Segment	Capacity	Capacity Configuration	Volume	V/C	LOS	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	15,000	Two-lane Collector	19,444	1.30	F	20,594	1.37	F
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	14,108	0.94	Е	15,598	1.04	F
	Sierra College Boulevard and City Limits ¹ (Loomis)	15,000	Two-lane Collector	17,954	1.20	F	18,154	1.21	F
Pacific Street	City Limits and Dominguez Road ¹	30,000	Four-lane Undivided Arterial	18,014	0.60	В	18,154	0.61	В
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	22,579	0.75	С	22,699	0.76	С
Rocklin Road	Pacific Street and Granite Drive	30,000	Four-lane Undivided Arterial	37,854	1.26	F	38,144	1.27	F
	I-80 and Sierra College Boulevard	30,000	Four-lane Undivided Arterial	18,089	0.60	В	18,249	0.61	В
	Sierra College Boulevard and Barton Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	14,634	0.49	А	15,634	0.52	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	7,066	0.47	А	7,136	0.48	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	9,788	0.65	В	10,078	0.67	В
Brace Road	I-80 and Barton Road ¹ (Loomis)	15,000	Two-lane Collector	9,654	0.64	В	10,084	0.67	В
	I-80 and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	7,846	0.52	А	9,466	0.63	В
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	30,000	Four-lane Undivided Arterial	27,005	0.90	Е	28,295	0.94	Е
	King Road and Taylor Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	22,616	0.75	С	23,906	0.80	С
	Taylor Road and I-80	50,525	Six-lane Arterial	32,455	0.64	В	37,265	0.74	С
	I-80 and Dominguez Road	50,525	Six-lane Arterial	31,944	0.63	В	35,539	0.70	В
	Dominguez Road and Rocklin Road ¹	50,525	Six-lane Arterial	33,802	0.67	В	36,767	0.73	С
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	30,000	Four-lane Undivided Arterial	17,659	0.59	А	18,519	0.62	В
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	7,403	0.25	А	8,183	0.27	А
Dominguez Road	Taylor Road and Granite Drive ¹	15,000	Two-lane Collector	5,221	0.35	А	5,356	0.36	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	15,000	Two-lane Collector	7,056	0.47	А	7,056	0.47	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan

As shown in Table O, the following five intersections operate at unsatisfactory LOS and are significantly impacted in the 2025 plus project Without Dominguez Road scenario:

- Rocklin Road/Granite Drive
- Sierra College Boulevard/Taylor Road (Loomis)
- Horseshoe Bar Road/Taylor Road (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)

As shown in Table P, the results of the roadway segment analysis indicate that the following five roadway segments that were forecast to operate with unsatisfactory LOS in the without project scenario would continue to operate with unsatisfactory LOS in the 2025 plus project Without Dominguez Road scenario:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Rocklin Road between Pacific Street and Granite Drive
- Sierra College Boulevard between English Colony Way and King Road (Placer County)

A peak-hour segment analysis was prepared for these five roadway segments and is shown in Table Q. As shown in Table Q, the segments along Sierra College Boulevard and Taylor Road would operate with satisfactory LOS during the a.m. and p.m. peak hours. As a result, the project would not create a significant impact on these roadway segments.

Recommended Mitigation: 2025 Plus Project Without Dominguez Road

- **Rocklin Road/Granite Drive.** The project would add traffic to this already-deficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project Without Dominguez Road scenario. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.
- Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project Without Dominguez Road scenario. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be

D 1	S	a	20	025 No Proje	ct	2025 Plus Project			
Roadway	Segment	Capacity	Volume V/C LOS			Volume V/C I			
aylor Road	King Rd and Horseshoe Bar Rd (Loomis)								
	A.M. Peak Hour Northbound	1,650	960	0.58	А	970	0.59	А	
	A.M. Peak Hour Southbound	1,650	1,195	0.72	C	1,211	0.73	C	
	Total A.M. Peak Hour	3,300	2,155	0.65	B	2,181	0.66	В	
			,						
	P.M Peak Hour Northbound	1,650	1,210	0.73	С	1,270	0.77	С	
	P.M Peak Hour Southbound	1,650	964	0.58	Α	1,019	0.62	В	
	Total P.M. Peak Hour	3,300	2,174	0.66	В	2,289	0.69	В	
	SAT Peak Hour Northbound	1,650	703	0.43	А	778	0.47	А	
	SAT Peak Hour Northbound	1,650	703	0.43	A	802	0.47	A	
	Total SAT Peak Hour	3,300	1,423	0.43	A	1,580	0.49	A	
			,						
aylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)								
	A.M. Peak Hour Northbound	1,650	481	0.29	А	496	0.30	А	
	A.M. Peak Hour Southbound	1,650	669	0.41	A	693	0.42	A	
	Total A.M. Peak Hour	3,300	1,150	0.35	А	1,189	0.36	А	
	P.M Peak Hour Northbound	1,650	683	0.41	А	771	0.47	Α	
	P.M Peak Hour Southbound	1,650	636	0.39	A	717	0.43	A	
	Total P.M. Peak Hour	3,300	1,319	0.40	Α	1,488	0.45	A	
	SAT Peak Hour Northbound	1,650	495	0.30	А	579	0.35	А	
	SAT Peak Hour Northbound	1,650	493	0.30	A	589	0.36	A	
	Total SAT Peak Hour	3,300	992	0.30	А	1,168	0.35	А	
aylor Road	Sierra College Blvd and City Limits (Loomis)								
	A.M. Peak Hour Northbound	1,650	390	0.24	A	393	0.24	A	
	A.M. Peak Hour Southbound Total A.M. Peak Hour	1,650	968 1,358	0.59 0.41	A	970 1,363	0.59 0.41	A	
	Total A.M. Feak Hou	5,500	1,558	0.41	А	1,505	0.41	А	
	P.M Peak Hour Northbound	1,650	949	0.58	А	959	0.58	А	
	P.M Peak Hour Southbound	1,650	629	0.38	А	639	0.39	А	
	Total P.M. Peak Hour	3,300	1,578	0.48	А	1,598	0.48	А	
	SAT Peak Hour Northbound	1,650	402	0.24	A	416	0.25	A	
	SAT Peak Hour Southbound Total SAT Peak Hour	1,650	340 742	0.21 0.22	A	353 769	0.21 0.23	A	
		5,500	/42	0.22	А	709	0.23	А	
Rocklin Road	Pacific St and Granite Dr								
		2 200	1 171	0.25		1 104	0.26		
	A.M. Peak Hour Eastbound A.M. Peak Hour Westbound	3,300 3,300	1,171 1,307	0.35	A	1,184 1,315	0.36	A	
	Total A.M. Peak Hour	6,600	2,478	0.40	A	2,499	0.40	A	
		0,000	2,770	0.00		-, 177	0.00		
	P.M Peak Hour Eastbound	3,300	1,606	0.49	А	1,649	0.50	А	
	P.M Peak Hour Westbound	3,300	1,462	0.44	А	1,509	0.46	А	
	Total P.M. Peak Hour	6,600	3,068	0.46	Α	3,158	0.48	Α	
	CAT Dask Hour Fasthound	2 200	1.017	0.21		1.092	0.22	A	
	SAT Peak Hour Eastbound SAT Peak Hour Westbound	3,300 3,300	1,017 700	0.31 0.21	A	1,082 760	0.33 0.23	A	
	Total SAT Peak Hour	6,600	1,717	0.21	A	1,842	0.23	A	
		.,	,,			.,			
	English Colony Way and King Rd (Placer County)								
Boulevard									
	A.M. Peak Hour Northbound	3,300	989	0.30	A	1,001	0.30	A	
	A.M. Peak Hour Southbound	3,300	1,287	0.39	A	1,305	0.40	A	
	Total A.M. Peak Hour	6,600	2,276	0.34	A	2,306	0.35	Α	
	P.M Peak Hour Northbound	3,300	1,299	0.39	А	1,366	0.41	А	
	P.M Peak Hour Southbound	3,300	1,113	0.34	A	1,175	0.36	A	
	Total P.M. Peak Hour	6,600	2,412	0.37	A	2,541	0.39	A	
	SAT Peak Hour Northbound	3,300	704	0.21	А	789	0.24	Α	
	CAT Deale Herry Constitutions of	3,300	1,014	0.31	А	1,106	0.34	А	
	SAT Peak Hour Southbound Total SAT Peak Hour	6,600	1,718	0.26	A	1,895	0.29	A	

Table Q: 2025 Without Dominguez Road - Peak Hour Roadway Segment Level of Service Summary

willing to cooperate construction of the contemplated improvement within a reasonable period of time (i.e., prior to the issuance of occupancy permits), the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

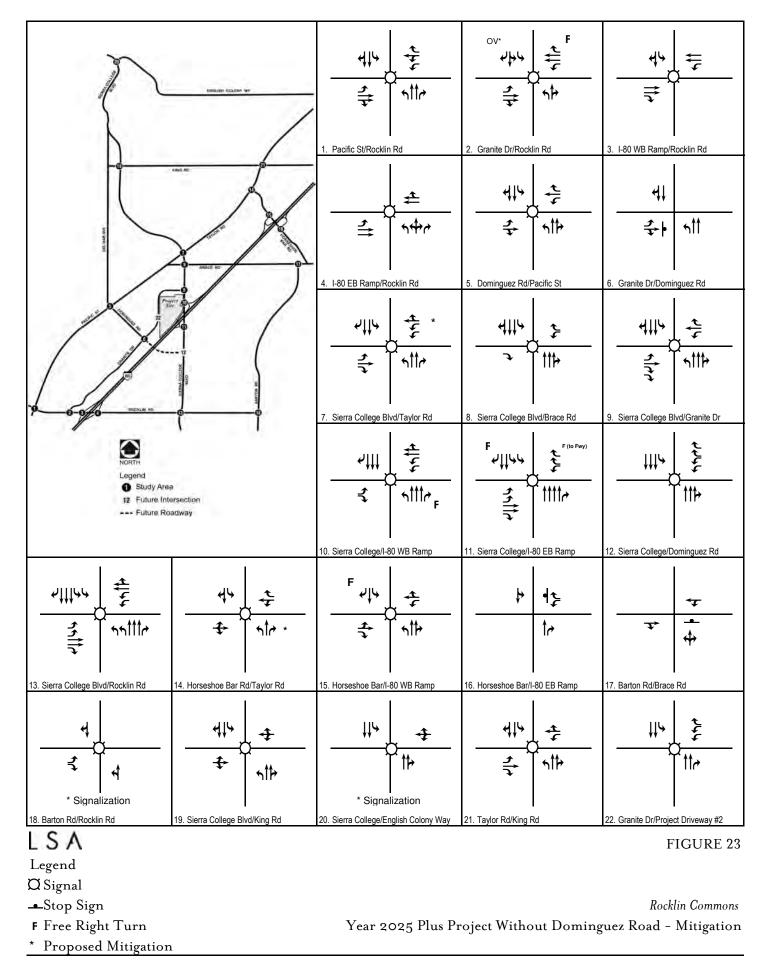
- Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location in the p.m. peak hour and degrades traffic operations to unacceptable LOS during the Saturday peak hour. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Barton Road/Rocklin Road (Loomis). The proposed project adds traffic to this already-deficient location in the a.m. peak hour and degrades to unacceptable LOS during the p.m. peak hour. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project Without Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. To mitigate the project contribution of traffic at this intersection, the project should participate on a fair-share basis in the installation of a traffic signal at Barton Road/Rocklin Road. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/English Colony Way (Placer County). This intersection is operating at an unsatisfactory LOS during the a.m., p.m., and Saturday peak hours in the no project condition. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project Without Dominguez Road extension scenario. The intersection would continue to meet

the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would mitigate the project impact at this location. Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County's CIP will ensure that any fair-share payment will actually result in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the County and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation.

Although the intersections of Rocklin Road/Pacific Street, Sierra College Boulevard/Rocklin Road, Horseshoe Bar Road/I-80 eastbound ramps, Barton Road/Brace Road, Sierra College Boulevard/King Road, and Taylor Road/King Road operate unsatisfactorily, in the 2025 plus project Without Dominguez Road scenario the project would not increase the v/c ratio by 0.05 or more in case of signalized intersections and would not add more than 5 percent of the total traffic at an unsignalized intersection. As a result, the project contribution of traffic at these intersections is not considered a significant impact.

The proposed mitigations for the 2025 plus project Without Dominguez Road scenario are shown in Figure 23. Per Town of Loomis¹ and Horseshoe Bar/Penryn Community Plan, Sierra College Boulevard is planned to be widened to a four-lane arterial between Taylor Road and State Route 193 (SR-193). In addition, the Town of Loomis has a proposed signal installation at the intersection of Barton Road/Rocklin Road for the near future.

¹ Brian Fragiao, Town of Loomis. Personal communication, January 17, 2007.



SPECIAL ISSUES

Dominguez Road Sensitivity Analysis

An analysis of forecast year 2025 traffic volumes was prepared assuming that Dominguez Road is extended east to Sierra College Boulevard. This alternative network is referred to as "with Dominguez Road" and is intended to provide a sensitivity analysis of the effects of extending Dominguez Road. At the direction of the City, signalization of the intersection of Dominguez Road/Granite Drive is assumed to be a part of the Dominguez Road is extension project which extends Dominguez Road east to Sierra College Boulevard.

2025 No Project with Dominguez Road. Weekday and Saturday peak-hour forecast traffic volumes for the 2025 no project with Dominguez Road scenario are shown in Figures 24 and 25. The LOS for study area intersections and roadway segments are shown in Tables R and S. The 2025 no project with Dominguez Road traffic volume development and LOS worksheets are provided in Appendix I.

As shown in Table R, the following 12 intersections are forecast to operate at unsatisfactory LOS in the 2025 no project with Dominguez Road condition:

- Rocklin Road/Pacific Street
- Rocklin Road/Granite Drive
- Dominguez Road/Pacific Street
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Rocklin Road
- Horseshoe Bar Road/Taylor Road (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramps (Loomis)
- Barton Road/Brace Road (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/King Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)
- Taylor Road/King Road (Loomis)

As shown in Table S, the results of the roadway segment analysis indicate that most of the study area roadway segments are forecast to operate within their daily roadway capacities except for the following five segments:

- Taylor Road between King Road and Horseshoe Bar Road (the Town of Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Rocklin Road between Pacific Street and Granite Drive
- Sierra College Boulevard between English Colony Way and King Road (Placer County)

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	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
Canci Alt	 110 / 132 ← 1071 / 1244 362 / 311	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	$\begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & & $	58/87 5	$\begin{array}{c} \begin{array}{c} & & \\ $
NORTH Legend O Study Area 12 Future Intersection Future Roadway	7 Sierra College Blvd/Taylor Rd 6 881/121 10 Sierra College/I-80 WB Ramp	8 Sierra College Blvd/Brace Rd 980 L / 261 ← 64 / 313 20 → 1 2 54 / 245 358 / 143 ← 254 / 245 358 / 143 ← 254 / 245 358 / 143 ← 254 / 245 299 / 60 → 125 (155 / 1	9 Sierra College Bivd/Granite Dr 9 Sierra College Bivd/Granite Dr 9 9 9 9 9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $	612 101565106 Ball-00 WB Kamp 612 102 10 WB Kamp 612 10 WB Kamp 61	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	130 / 659 ↔ 130 / 659 ↔ 1
18 Barton Rd/Rocklin Rd 19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 24

123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Year 2025 No Project Peak Hour Traffic Volumes - With Dominguez Road

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	1	10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
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13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
88 58 ↓ ↓ 264 ↑ ↑ ↑ 415 ↓ ₹ 22	$\begin{array}{c} & 116 \\ & 786 \leftarrow 13 \\ \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow & 13 \\ \downarrow \downarrow \downarrow \downarrow & 13 \\ \hline 33 \rightarrow 9 \\ 10 \\ \hline \end{array}$	659 テ 170 585 → 170 126 → 09 → 1 126 → 09 →	€ 424 67 75 ← 85 2 → 5 ← 119 101 → ← ↑ ↑ 108 → 65 171 →	612 ← 512
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 25
				I TOUKE 2J

1234 Saturday Peak Hour Volume

Rocklin Commons

Year 2025 No Project Saturday Peak Hour Traffic Volumes - With Dominguez Road

Table R: 2025 No Project with Dominguez Road Condition Peak Hour Intersection Level of Service Summary

			2025 No 1	Project with Doming	uez Road	Condition	
		AM Peak H	our	PM Peak Ho	our	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.775	С	0.817	D	0.585	А
2 Rocklin Road/Granite Drive	Signalized	0.693	В	1.015	F	0.685	В
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.2 sec	С	42.7 sec	D	28.1 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	46.3 sec	D	36.7 sec	D	15.2 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.608	В	0.836	D	0.444	А
6 Dominguez Road/Granite Drive ¹²	Signalized	0.511	А	0.596	А	0.553	А
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.965	Е	0.949	Е	0.566	А
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.570	А	0.720	С	0.330	А
9 Sierra College Boulevard/Granite Drive	Signalized	0.674	В	0.605	В	0.544	А
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	11.7 sec	В	9.5 sec	А	6.2 sec	А
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	13.1 sec	В	15.3 sec	В	22.1 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.571	А	0.810	D	0.872	D
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.867	D	0.756	С	0.492	А
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.956	Е	0.968	Е	0.703	С
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.7 sec	С	21.5 sec	С	22.6 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹² (Loomis)	Unsignalized	31.3 sec	D	24.7 sec	С	16.2 sec	С
17 Barton Road/Brace Road ¹² (Loomis)	Unsignalized	90.6 sec	F	59.8 sec	F	12.3 sec	В
18 Barton Road/Rocklin Road ¹² (Loomis)	Unsignalized	346.4 sec	F	23.1 sec	С	18.1 sec	С
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.711	С	0.844	D	0.529	А
20 Sierra College Boulevard/English Colony Way ¹² (Placer County)	Unsignalized	315.4 sec	F	816.6 sec	F	40.3 sec	Е
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.983	Е	0.604	В	0.688	В
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Exceeds level of service criteria

Table S: 2025 No Project With Dominguez Road Daily Roadway Segment Level of Service Summary

Roadway	Segment	Capacity	Capacity Configuration	Volume	V/C	LOS
Taylor Road	King Road and Horseshoe Bar Road ¹ (Loomis)	15,000	Two-lane Collector	19,377	1.29	F
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	14,089	0.94	Е
	Sierra College Boulevard and City Limits ¹ (Loomis)	15,000	Two-lane Collector	16,764	1.12	F
Pacific Street	City Limits and Dominguez Road ¹	30,000	Four-lane Undivided Arterial	16,824	0.56	А
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	22,767	0.76	С
Rocklin Road	Pacific Street and Granite Drive	30,000	Four-lane Undivided Arterial	38,004	1.27	F
	I-80 and Sierra College Boulevard	30,000	Four-lane Undivided Arterial	14,373	0.48	А
	Sierra College Boulevard and Barton Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	14,765	0.49	А
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	7,049	0.47	А
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	9,795	0.65	В
Brace Road	I-80 and Barton Road ¹ (Loomis)	15,000	Two-lane Collector	9,523	0.63	В
	I-80 and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	7,704	0.51	А
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	30,000	Four-lane Undivided Arterial	26,983	0.90	D
	King Road and Taylor Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	22,657	0.76	С
	Taylor Road and I-80	50,525	Six-lane Arterial	31,529	0.62	В
	I-80 and Dominguez Road	50,525	Six-lane Arterial	31,126	0.62	В
	Dominguez Road and Rocklin Road ¹	50,525	Six-lane Arterial	35,336	0.70	В
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	30,000	Four-lane Undivided Arterial	8,909	0.30	А
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	13,376	0.45	А
Dominguez Road	Taylor Road and Granite Drive ¹	15,000	Two-lane Collector	7,565	0.50	А
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	15,000	Two-lane Collector	7,005	0.47	А

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan

2025 Plus Project with Dominguez Road. Traffic volumes generated by the proposed project were added to the 2025 no project traffic volumes, and LOS were calculated for the 2025 plus project with Dominguez Road scenario. Weekday and Saturday peak-hour forecast traffic volumes for the 2025 plus project with Dominguez Road scenario are shown in Figures 26 and 27. The LOS for study area intersections and roadway segments in the 2025 plus project with Dominguez Road scenario are shown in Tables T and U. The 2025 plus project with Dominguez Road LOS worksheets are provided in Appendix J.

As shown in Table T, the following seven intersections are forecast to operate at unsatisfactory LOS and are significantly impacted in the 2025 plus project with Dominguez Road scenario:

- Rocklin Road/Granite Drive
- Sierra College Boulevard/Taylor Road (Loomis)
- Sierra College Boulevard/Dominguez Road
- Horseshoe Bar Road/Taylor Road (Loomis)
- Horseshoe Bar Road/I-80 eastbound ramps (Loomis)
- Barton Road/Rocklin Road (Loomis)
- Sierra College Boulevard/English Colony Way (Placer County)

As shown in Table U, the results of the roadway segment analysis indicate that the following five roadway segments that were forecast to operate with unsatisfactory LOS in the without project scenario would continue to operate with unsatisfactory LOS in the 2025 plus project with Dominguez Road scenario:

- Taylor Road between King Road and Horseshoe Bar Road (Loomis)
- Taylor Road between Horseshoe Bar Road and Sierra College Boulevard (Loomis)
- Taylor Road between Sierra College Boulevard and City Limits (Loomis)
- Rocklin Road between Pacific Street and Granite Drive
- Sierra College Boulevard between English Colony Way and King Road (Placer County)

A peak-hour segment analysis was prepared for these five roadway segments and is shown in Table V. As shown in Table V, the segments along Sierra College Boulevard and Taylor Road would operate with satisfactory LOS during the a.m. and p.m. peak hours. As a result, the project would not create a significant impact on these roadway segments.

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		198 / 275 → 09 / 277 × 82 60 / 64 → 82 / 278 / 98 60 / 64 → 82 / 98 1 Pacific St/Rocklin Rd	187 / 448 ↑ ↑ ↑ ↑ ↑ 957 / 1127 → 92 € 0 13 / 32 2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
and the second s		$\begin{array}{c} & \swarrow & 110 / 132 \\ \leftarrow & 1071 / 1247 \\ \hline 365 / 321 & \frown & \uparrow & \uparrow \\ \hline 763 / 849 & \rightarrow \\ \hline 828 & & \swarrow \\ 828 & & & \swarrow \\ 828 & & & & \\ \hline 828 & & & \\ \hline 828 & & & & \\ 828 & & & \\ \hline 828 & & & \\ 828 & & & \\ 828 & & & \\ \hline 828 & & & \\ 828 & & & \\ \hline 828 & & & \\ 828 & & & \\ 828 & & & \\$	$\begin{array}{c} 88\\ 88\\ 88\\ 88\\ 88\\ 88\\ 88\\ 88\\ 88\\ 88$	$\begin{array}{c} 88 \\ 88 \\ 122 \\ 88 \\ 123 \\ 123 \\ 65 \\ 100 \\ 1133 \\ 12$
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0 0 0 0 monum no	- (진 영 전 7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	ි සිierra College Blvd/Granite Dr
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2 382	5 2	10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
$\begin{array}{c} 294/145\\ 249/145\\ 249/145\\ 249/145\\ 240/291\\ 240/2$	$\begin{array}{c} 581/862\\ 11/1 \\ 23/9 \\ $	$\begin{array}{c} 34/51\\ \leftarrow 34/51\\ \leftarrow 83/52\\ \downarrow \\ 111/91 \rightarrow 1\\ 54/47 \rightarrow 158/128 \end{array}$	855/533 ↔ 111/101 ↔ 137/101 ↔ 137/101 ↔ 137/101 ↔ 137/101	$\begin{array}{c} \leftarrow 392/221 \\ \downarrow 159/198 \\\hline 161/359 \rightarrow & \frown & \circlearrowright \\ 125/224 & \bigcirc & 41/52 \\ \downarrow 152/224 & \bigcirc & 41/52 \\ \downarrow 51/5 \\ \downarrow 71/5 \\ \downarrow 71$
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
120/512 120/512 120/512 ↓ 120/512 ↓ 120/512 ↓ 120/512 ↓	$\begin{array}{c} 01/12\\ 10/61 \rightarrow 7\\ 10/61 \rightarrow 7\\ 4/5 \rightarrow 7\\ 4/5 \rightarrow 7\\ 10/61 \rightarrow 7\\ 1$	+ 1186/781 ← 1186/781 569/1244 → 15/126 ↓ 1244 → 15/126 ↓ 1244	462 218/77 562 52 576/125 172/103 276/125 14 150/209 18/77 289/267 18/77	236/791 → 555/403 21/71 → 51 21/71 → 51 59
18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 26
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123 / 456 AM / PM Peak Hour Volume

Rocklin Commons

Year 2025 Plus Project Peak Hour Traffic Volumes - With Dominguez Road

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N	/	1 Pacific St/Rocklin Rd	2 Granite Dr/Rocklin Rd	3 I-80 WB Ramp/Rocklin Rd
attention of the second s		1592 → ঢ় 290 ← 589 313 ♪ ᠬ ᠠ 592 → ঢ়	$\begin{array}{c} 1 \\ 8 \\ 8 \\ 42 \\ 42 \\ 506 \\ 44 \\ 44 \\ 7 \end{array}$	11 - 1 - 2 - 22 - 23 - 23 - 23 - 23 - 23 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2
		4 I-80 EB Ramp/Rocklin Rd	5 Dominguez Rd/Pacific St	6 Granite Dr/Dominguez Rd
		$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	935 → ↑ 112 935 → ↑ 1 12 134 → ↑ 1 12	$\begin{array}{c} 129\\ \hline 29\\ \hline 20\\ $
	1 1	7 Sierra College Blvd/Taylor Rd	8 Sierra College Blvd/Brace Rd	9 Sierra College Blvd/Granite Dr
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		10 Sierra College/I-80 WB Ramp	11 Sierra College/I-80 EB Ramp	12 Sierra College/Dominguez Rd
99 53 53 53 93 94 → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	$\begin{array}{c} & \begin{array}{c} & \begin{array}{c} & \begin{array}{c} & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \begin{array}{c} & \end{array} \\ \\ & \end{array} \\ & \end{array} \\ & \begin{array}{c} & \end{array} \\ & \end{array} \\ & \end{array} \\ \\ & \end{array} \\ & \end{array} \\ \\ & \end{array} \\ \\ & \end{array} \\ \\ & \end{array} \\ \\ \end{array} \\ & \end{array} \\ \\ \end{array} \\ \end{array}$	$\begin{array}{c} 525\\ 60\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\ 7\\$	لک 230 ↓ ↓ ↓ 230 ♦ ↓ ↓ ↓ 89 88 88 88 88 88 88 88 88 88	← 223 ⊊ 104 299 → ີ ີ ີ ↑ 39 ີ ເຊີ
13 Sierra College/Rocklin Rd	14 Horseshoe Bar Rd/Taylor Rd	15 Horseshoe Bar/I-80 WB Ramp	16 Horseshoe Bar/I-80 EB Ramp	17 Barton Rd/Brace Rd
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18 Barton Rd/Rocklin Rd	19 Sierra College Blvd/King Rd	20 Sierra College/English Colony	21 Taylor Rd/King Rd	22 Granite Dr/Project Driveway #2 FIGURE 27

1234 Saturday Peak Hour Volume

Rocklin Crossings

Year 2025 Plus Project Saturday Peak Hour Traffic Volumes - With Dominguez Road

Table T: 2025 Plus Project with Dominguez Road Condition Peak Hour Intersection Level of Service Summary

		2	025 No P	roject with Domingu	ez Road	Condition		20	025 Plus l	Project with Doming	uez Road	l Condition	
		AM Peak Ho	ur	PM Peak Ho	ur	Saturday		AM Peak Ho	ur	PM Peak Ho	ır	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.775	С	0.817	D	0.585	А	0.781	С	0.841	D^2	0.618	В
2 Rocklin Road/Granite Drive	Signalized	0.693	В	1.015	F	0.685	В	0.704	С	1.067	F	0.729	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.2 sec	С	42.7 sec	D	28.1 sec	С	26.3 sec	С	44.2 sec	D	28.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	46.3 sec	D	36.7 sec	D	15.2 sec	В	46.6 sec	D	37.6 sec	D	15.2 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.608	В	0.836	D	0.444	А	0.609	в	0.842	D^2	0.454	Α
6 Dominguez Road/Granite Drive ¹³	Signalized	0.511	А	0.596	А	0.553	А	0.515	А	0.609	В	0.553	А
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.965	Е	0.949	Е	0.566	А	0.991	E^2	1.032	F	0.684	В
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.570	А	0.720	С	0.330	А	0.596	А	0.790	С	0.473	А
9 Sierra College Boulevard/Granite Drive	Signalized	0.674	В	0.605	В	0.544	А	0.705	С	0.708	С	0.687	В
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	11.7 sec	В	9.5 sec	А	6.2 sec	Α	12.3 sec	В	53.5 sec	D	46.5 sec	D
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	13.1 sec	В	15.3 sec	В	22.1 sec	С	13.1 sec	В	26.2 sec	С	28.4 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.571	А	0.810	D	0.872	D	0.577	А	0.860	D	0.921	E
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.867	D	0.756	С	0.492	А	0.877	D^2	0.795	С	0.558	А
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.956	Е	0.968	Е	0.703	С	0.966	E^2	1.017	F	0.772	С
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.7 sec	С	21.5 sec	С	22.6 sec	С	22.7 sec	С	21.5 sec	С	22.6 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹³ (Loomis)	Unsignalized	31.3 sec	D	24.7 sec	С	16.2 sec	С	31.9 sec	D^2	25.9 sec	D	16.9 sec	С
17 Barton Road/Brace Road ¹³ (Loomis)	Unsignalized	90.6 sec	F	59.8 sec	F	12.3 sec	В	96.2 sec	F^2	76.1 sec	F^2	13.3 sec	В
18 Barton Road/Rocklin Road ¹³ (Loomis)	Unsignalized	346.4 sec	F	23.1 sec	С	18.1 sec	С	383.6 sec	F	30.6 sec	D	26.0 sec	D
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.711	С	0.844	D	0.529	А	0.715	С	0.867	D^2	0.559	А
20 Sierra College Boulevard/English Colony Way ¹³ (Placer County)	Unsignalized	315.4 sec	F	816.6 sec	F	40.3 sec	Е	336.6 sec	F^2	*	F	58.1 sec	F
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.983	Е	0.604	В	0.688	В	0.989	E^2	0.624	В	0.715	С
22 Granite Drive/Project Driveway #2	-	-	-	-	-	-	-	0.201	А	0.310	А	0.223	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

 2 $\,$ Project impact is less than 5% of total intersection V/C or delay and therefore not a significant impact.

³ Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Exceeds level of service criteria

(Shade) = Significant Impact

Table U: 2025 With Dominguez Road Daily Roadway Segment Level of Service Summary

				202	5 No Proje	ct	2025 Plus Project			
Roadway	Segment	Capacity	Capacity Configuration	Volume	V/C	LOS	Volume	V/C	LOS	
Taylor Road	Road King Road and Horseshoe Bar Road ¹ (Loomis)		Two-lane Collector	19,377	1.29	F	20,527	1.37	F	
	Horseshoe Bar Road and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	14,089	0.94	Е	15,579	1.04	F	
	Sierra College Boulevard and City Limits ¹ (Loomis)	15,000	Two-lane Collector	16,764	1.12	F	16,964	1.13	F	
Pacific Street	City Limits and Dominguez Road ¹	30,000	Four-lane Undivided Arterial	16,824	0.56	А	16,964	0.57	А	
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	22,767	0.76	С	22,887	0.76	С	
Rocklin Road	Pacific Street and Granite Drive	30,000	Four-lane Undivided Arterial	38,004	1.27	F	38,294	1.28	F	
	I-80 and Sierra College Boulevard	30,000	Four-lane Undivided Arterial	14,373	0.48	А	14,533	0.48	А	
	Sierra College Boulevard and Barton Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	14,765	0.49	А	15,765	0.53	А	
Barton Road	Rocklin Road and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	7,049	0.47	А	7,119	0.47	А	
Horseshoe Bar Road	I-80 and Brace Road ¹ (Loomis)	15,000	Two-lane Collector	9,795	0.65	В	10,085	0.67	В	
Brace Road	I-80 and Barton Road ¹ (Loomis)	15,000	Two-lane Collector	9,523	0.63	В	9,953	0.66	В	
	I-80 and Sierra College Boulevard ¹ (Loomis)	15,000	Two-lane Collector	7,704	0.51	А	9,324	0.62	В	
Sierra College Boulevard	English Colony Way and King Road ¹ (Placer County)	30,000	Four-lane Undivided Arterial	26,983	0.90	D	28,273	0.94	Е	
	King Road and Taylor Road ¹ (Loomis)	30,000	Four-lane Undivided Arterial	22,657	0.76	С	23,947	0.80	С	
	Taylor Road and I-80	50,525	Six-lane Arterial	31,529	0.62	В	36,339	0.72	С	
	I-80 and Dominguez Road	50,525	Six-lane Arterial	31,126	0.62	В	34,721	0.69	В	
	Dominguez Road and Rocklin Road ¹	50,525	Six-lane Arterial	35,336	0.70	В	38,301	0.76	С	
Granite Drive	Dominguez Road and Sierra College Boulevard ¹	30,000	Four-lane Undivided Arterial	8,909	0.30	А	9,769	0.33	А	
	Dominguez Road and Rocklin Road ¹	30,000	Four-lane Undivided Arterial	13,376	0.45	А	14,156	0.47	А	
Dominguez Road	Taylor Road and Granite Drive ¹	15,000	Two-lane Collector	7,565	0.50	А	7,700	0.51	А	
King Road	Sierra College Boulevard and Taylor Road ¹ (Loomis)	15,000	Two-lane Collector	7,005	0.47	А	7,005	0.47	А	

Notes:

¹ LOS C required for these segments. LOS D acceptable for all other segments.

Exceeds level of service criteria

Roadway Improvements consistent with City of Rocklin General Plan, Town of Loomis General Plan, and the Horseshoe Bar/Penryn Community Plan

	a		20	025 No Proje	ct	2025 Plus Project				
ylor Road	Segment	Capacity	Volume	V/C	LOS	Volume	ů			
aylor Road	King Rd and Horseshoe Bar Rd (Loomis)									
	A.M. Peak Hour Northbound	1,650	929	0.56	A	939	0.57	Α		
	A.M. Peak Hour Southbound	1,650	1,168	0.71	С	1,184	0.72	С		
	Total A.M. Peak Hour	3,300	2,097	0.64	В	2,123	0.64	В		
					-					
	P.M Peak Hour Northbound	1,650	1,207	0.73	C	1,267	0.77	С		
	P.M Peak Hour Southbound	1,650	963	0.58	A	1,018	0.62	В		
	Total P.M. Peak Hour	3,300	2,170	0.66	В	2,285	0.69	В		
		1.650	702	0.42		770	0.47			
	SAT Peak Hour Northbound	1,650	703	0.43	A	778	0.47	A		
	SAT Peak Hour Southbound Total SAT Peak Hour	1,650 3,300	720	0.44 0.43	A	802 1,580	0.49 0.48	A		
	Total SAT Feak Houl	3,300	1,425	0.45	A	1,380	0.46	A		
aylor Road	Horseshoe Bar Rd and Sierra College Blvd (Loomis)									
2	<u> </u>									
	A.M. Peak Hour Northbound	1,650	476	0.29	A	491	0.30	A		
	A.M. Peak Hour Southbound	1,650	662	0.40	A	686	0.42	A		
	Total A.M. Peak Hour	3,300	1,138	0.34	А	1,177	0.36	Α		
	D M Deele Herry Newton and	1.650	(70	0.41		7(7	0.44			
	P.M Peak Hour Northbound	1,650	679	0.41	A	767	0.46	A		
	P.M Peak Hour Southbound	1,650	631	0.38	A	712	0.43	A		
	Total P.M. Peak Hour	3,300	1,310	0.40	Α	1,479	0.45	Α		
	CAT Dool: Hour Northbour 1	1.650	489	0.20		572	0.25			
	SAT Peak Hour Northbound SAT Peak Hour Southbound	1,650 1,650	489 493	0.30	A	573 585	0.35	A		
	Total SAT Peak Hour	3,300	493 982	0.30	A	585 1,158	0.35	A		
	Total SAT Peak Hour	3,300	982	0.30	A	1,158	0.35	А		
aylor Road	Sierra College Blvd and City Limits (Loomis)									
•										
	A.M. Peak Hour Northbound	1,650	360	0.22	Α	363	0.22	Α		
	A.M. Peak Hour Southbound	1,650	888	0.54	А	890	0.54	А		
	Total A.M. Peak Hour	3,300	1,248	0.38	А	1,253	0.38	Α		
	P.M Peak Hour Northbound	1,650	874	0.53	A	884	0.54	A		
	P.M Peak Hour Southbound	1,650	574	0.35	Α	584	0.35	A		
	Total P.M. Peak Hour	3,300	1,448	0.44	Α	1,468	0.44	Α		
		1.650	077	0.00		201	0.04			
	SAT Peak Hour Northbound	1,650	377	0.23	A	391	0.24	A		
	SAT Peak Hour Southbound	1,650	321	0.19	A	334	0.20	A		
	Total SAT Peak Hour	3,300	698	0.21	Α	725	0.22	Α		
Pocklin Pood	Pacific St and Granite Dr									
COCKIIII KOau	Factine St and Granite Di									
	A.M. Peak Hour Eastbound	3,300	1,144	0.35	А	1,157	0.35	А		
	A.M. Peak Hour Westbound	3,300	1,144	0.33	A	1,137	0.33	A		
	Total A.M. Peak Hour	6,600	2,444	0.37	A	2,465	0.37	A		
	rom ray, row nou	0,000	2,777	0.57	А	2,405	0.57	А		
	P.M Peak Hour Eastbound	3,300	1,564	0.47	А	1,607	0.49	А		
	P.M Peak Hour Westbound	3,300	1,406	0.43	A	1,453	0.44	A		
	Total P.M. Peak Hour	6,600	2,970	0.45	A	3,060	0.46	A		
		7	<i>y</i> 			,				
	SAT Peak Hour Eastbound	3,300	1,017	0.31	А	1,082	0.33	А		
	SAT Peak Hour Westbound	3,300	668	0.20	А	728	0.22	А		
	Total SAT Peak Hour	6,600	1,685	0.26	А	1,810	0.27	А		
ierra College	English Colony Way and King Rd (Placer County)						_			
oulevard		2 200	0(1	0.00		072	0.00			
	A.M. Peak Hour Northbound	3,300	961	0.29	A	973	0.29	A		
	A.M. Peak Hour Southbound	3,300	1,281	0.39	A	1,299	0.39	A		
	Total A.M. Peak Hour	6,600	2,242	0.34	Α	2,272	0.34	Α		
	P.M Peak Hour Northbound	3,300	1,303	0.39	А	1,370	0.42	А		
	P.M Peak Hour Southbound	3,300	1,108	0.34	A	1,170	0.35	A		
	Total P.M. Peak Hour	6,600	2,411	0.37	Α	2,540	0.38	А		
	SAT Peak Hour Northbound	3,300	711	0.22	А	796	0.24	А		
	SAT Peak Hour Northbound	3,300	1,009	0.22	A	1,101	0.24	A		
	Total SAT Peak Hour	6,600	1,009	0.31	A	1,101	0.33	A		
	. oral of 11 1 our 11001	0,000	1,720	0.20	A .	1,077	0.27	n		

Table V: 2025 With Dominguez Road - Peak Hour Roadway Segment Level of Service Summary

Recommended Mitigation: 2025 Plus Project With Dominguez Road

- Rocklin Road/Granite Drive. The proposed project would add traffic to this already-deficient location, which operates at LOS F during the p.m. peak hour in the 2025 no project with Dominguez Road scenario. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.
- Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project with Dominguez Road scenario. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/Dominguez Road. The proposed extension of Dominguez Road will create a deficiency during the Saturday peak hour at this intersection in the 2025 no project with Dominguez scenario. The proposed intersection striping will not be sufficient to accommodate project traffic in the 2025 with Dominguez Road scenario. However, if the currently proposed lane configuration were restriped to accommodate dual southbound left-turn lanes and two southbound through lanes at the time of its construction, then the intersection would operate at a satisfactory LOS. This configuration can exist in the same right-of-way currently planned for this intersection. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.
- Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location in the p.m. peak hour and degrades traffic operations to unacceptable LOS during the Saturday peak hour. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate

in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

- Horseshoe Bar Road/I-80 Eastbound Ramps (Loomis). The proposed project would degrade traffic operations to unacceptable LOS during the p.m. peak hour in the 2025 with Dominguez Road extension scenario. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- **Barton Road/Rocklin Road (Loomis).** The proposed project adds traffic to this already-deficient location in the a.m. peak hour and degrades traffic operations to unacceptable LOS during the p.m. peak hour. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/English Colony Way (Placer County). This intersection is operating at an unsatisfactory LOS during the a.m., p.m., and Saturday peak hours in the no project condition. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would mitigate the project impact at this location. Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County's CIP will ensure that any fair-share payment will actually result in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the County and thus cannot

take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation.

Although the intersections of Rocklin Road/Pacific Street, Dominguez Road/Pacific Street, Sierra College Boulevard/Rocklin Road, Barton Road/Brace Road, Sierra College Boulevard/King Road, and Taylor Road/King Road operate unsatisfactorily, in the 2025 plus project with Dominguez Road scenario the project would not increase the v/c ratio by 0.05 or more in case of signalized intersections and would not add more than 5 percent of the total traffic at an unsignalized intersection. As a result, the project contribution of traffic at these intersections is not considered a significant impact.

The proposed mitigations for the 2025 plus project with Dominguez Road scenario are shown in Figure 28. Per the Town of Loomis¹ and Horseshoe Bar/Penryn Community Plans, Sierra College Boulevard is planned to be widened to a four-lane arterial between Taylor Road and SR-193. In addition, the Town of Loomis has a proposed signal installation at the intersection of Barton Road/ Rocklin Road for the near future.

Freeway Mainline Analysis

In order to assess the operation of the highway system in the vicinity of the project in 2025 without and with project conditions, the I-80 freeway mainline between the Horseshoe Bar Road and Atlantic Street interchanges and the SR-65 mainline between the I-80 junction and Blue Oaks Boulevard were analyzed for both without and with Dominguez Road extension scenarios. The Caltrans I-80 freeway improvement project² between Riverside Avenue/Auburn Boulevard and SR-65 proposes to increase freeway capacity by adding HOV lane and auxiliary lanes by 2009. Since the proposed project has CEQA clearance and funding, the improvements are used in the baseline conditions. Therefore, the I-80 freeway mainline between Atlantic Street and SR-65 was analyzed as a future eight-lane (mainline) freeway, and the freeway mainline segment between SR-65 and Horseshoe Bar Road interchange was analyzed as six-lane freeway. Caltrans LOS standard for their facilities is LOS E. As shown in Table W, current capacity on I-80 between Atlantic Street and SR-65 and on SR-65 between I-80 and Harding Avenue will not serve baseline demand at an acceptable LOS in the p.m. peak hour. The project increase in traffic volume is less than 5 percent and is therefore less than significant. All freeway mainline segments along I-80 are projected to operate at LOS D or better in 2025 (for both without and with Dominguez Road extension scenarios) with the future eight-lane freeway for the segment between Atlantic Street and SR-65. Also, all freeway segments along SR-65 are projected to operate at LOS D or better in 2025 with the future six-lane freeway. The HCS worksheets are provided in Appendices K, L, and M.

¹ Brian Fragiao, Town of Loomis. Personal communication, January 17, 2007.

² Freeway Improvement Project on Interstate 80 from 1.1 km west of the Sacramento/Placer County line to 1.56 km east of the Route 65 connector in Placer County, April 2003, Caltrans.

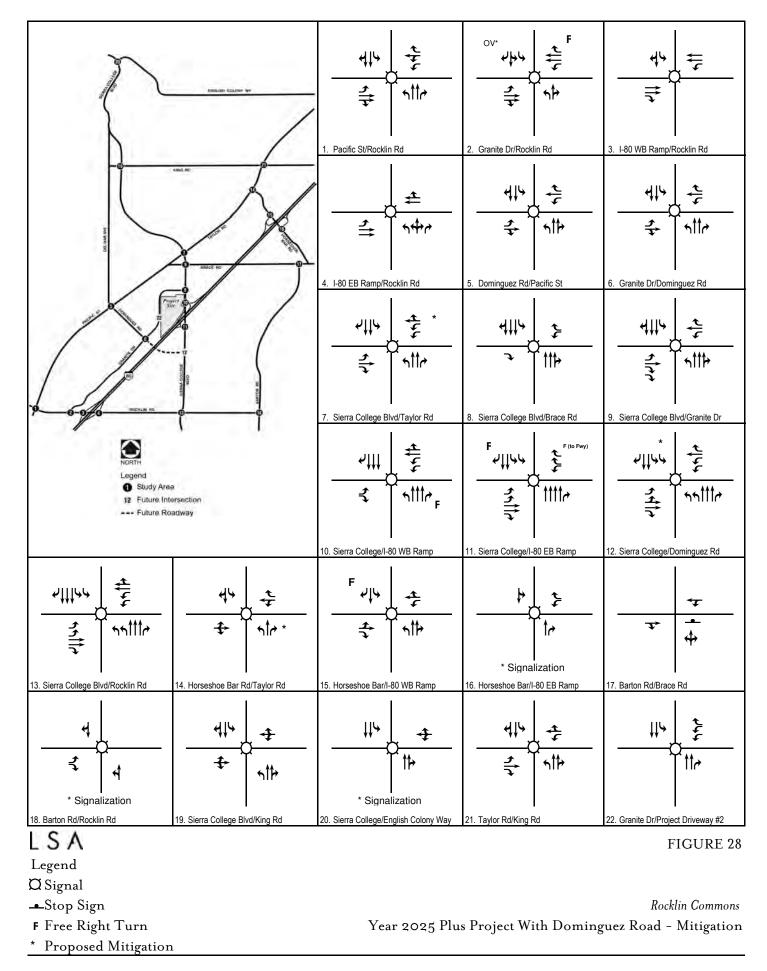


Table W: Freeway Segment Level of Service Summary

		I					Ba	seline						 1
				Exis	ting Pl	lus Appro		senne	Ex	isting Pl	us App	roved Pl	us Proje	ect
		Number		AM	ę		PM			AM			PM	
Roadway	Segment	of Lanes	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	3	4010	21.9	С	6844	>45	F	4027	22.0	С	6905	>45	F
	Taylor Road to RTE 65	3	4157	22.8	С	6456	>45	F	4175	22.9	С	6525	>45	F
	RTE 65 to Rocklin Road	3	3238	17.6	В	5088	29.5	D	3268	17.8	В	5200	30.5	D
	Rocklin Road to Sierra College Boulevard	3	2643	14.4	В	4996	28.7	D	2674	14.6	В	5109	29.6	D
	Sierra College Boulevard to Horseshoe Bar Road	3	2547	13.9	B	4745	26.7	D	2556	13.9	B	4779	27.0	D
RTE 65 NB	I-80 to Harding Boulevard	2	3799	39.1	Е	4144	>45	F	3811	39.4	Е	4187	>45	F
	Harding Boulevard to Blue Oaks Boulevard	2	3612	35.2	Е	3910	41.9	Е	3617	35.3	Е	3927	42.3	Е
I-80 WB	Atlantic Street to Taylor Road	3	6267	44.5	Е	5236	30.8	D	6275	44.7	Е	5290	31.3	D
	Taylor Road to RTE 65	3	5527	33.7	D	4964	28.4	D	5538	33.9	D	5037	29	D
	RTE 65 to Rocklin Road	3	4298	23.7	С	3939	21.5	С	4316	23.8	С	4057	22.2	С
	Rocklin Road to Sierra College Boulevard	3	4526	25.2	С	3549	19.3	С	4545	25.3	С	3676	20.0	С
	Sierra College Boulevard to Horseshoe Bar Road	3	4369	24.1	С	3311	18.0	С	4374	24.2	С	3348	18.2	С
RTE 65 SB	I-80 to Harding Boulevard	2	3515	33.5	D	3324	30.5	D	3521	33.6	D	3369	31.1	D
	Harding Boulevard to Blue Oaks Boulevard	2	3344	30.8	D	3124	27.8	D	3347	30.8	D	3142	28.0	D
						Without	Doming	uez Ro	ad Exter	nsion				
		Number			2025 N	lo Project					025 Wi	h Projec	t	
		of Lanes		AM			PM			AM			PM	
Roadway	Segment			Density	LOS		Density		Volume	2		Volume	,	
I-80 EB	Atlantic Street to Taylor Road	4	5384	22.1	С	7419	33.6	D	5401	22.2	С	6751	34.2	D
	Taylor Road to RTE 65	4	5320	21.8	С	6809	29.2	D	5338	21.9	С	6349	29.6	D
	RTE 65 to Rocklin Road	3	3995	21.9	C	5052	28.2	D	4025	22.0	C	4915	29.1	D
	Rocklin Road to Sierra College Boulevard	3	3623	19.7	C	5039	28.1	D	3654	19.9	C	4823	29.0	D
	Sierra College Boulevard to Horseshoe Bar Road	3	3313	18.1	С	5110	29.3	D	3322	18.1	С	4696	29.6	D
RTE 65 NB	I-80 to Harding Boulevard	3	4708	28.0	D	5010	30.3	D	4719	28.1	D	4077	30.7	D
	Harding Boulevard to Blue Oaks Boulevard	3	4360	26.2	D	4825	28.9	D	4364	25.4	С	3883	29.0	D
I-80 WB	Atlantic Street to Taylor Road	4	6538	27.9	D	6764	29	D	6546	28.0	D	5166	29.3	D
	Taylor Road to RTE 65	4	5605	23.1	C	6236	25.8	C	5616	23.2	C	4870	26.2	D
	RTE 65 to Rocklin Road	3	4091	22.4	C	4852	26.6	D	4109	22.5	C	3787	27.5	D
	Rocklin Road to Sierra College Boulevard	3	4613	25.8	C	4412	23.6	C	4632	25.9	C	3384	24.4	C
	Sierra College Boulevard to Horseshoe Bar Road	3	4641	26.0	C	4026	21.8	C	4647	26.0	D	3260	22.0	C
RTE 65 SB	I-80 to Harding Boulevard	3	4301	24.9	C	4170	23.7	C	4308	25.0	C	3259	24.0	C
	Harding Boulevard to Blue Oaks Boulevard	3	4297	26.0	D	4023	23.9	C	4299	24.9	Č	3098	23.1	C
	0		•			With D	Oomingue	ez Road	d Extens	ion				
		Number			2025 N	lo Project	t			20	25 Wi	h Projec	t	
		Number of Lanes		AM			PM			AM			PM	
Roadway	Segment	of Lanes	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
I-80 EB	Atlantic Street to Taylor Road	4	5395	22.2	С	7398	34.0	D	5411	22.2	С	7459	34.5	D
	Taylor Road to RTE 65	4	5320	21.8	С	6770	29.4	D	5339	21.9	С	6839	29.8	D
	RTE 65 to Rocklin Road	3	3992	21.8	С	4951	28.3	D	4022	22.0	С	5063	29.2	D
	Rocklin Road to Sierra College Boulevard	3	3648	19.9	С	4947	28.3	D	3679	20.1	С	5060	29.2	D
	Sierra College Boulevard to Horseshoe Bar Road	3	3316	18.1	С	5075	29.3	D	3325	18.1	С	5110	29.6	D
RTE 65 NB	I-80 to Harding Boulevard	3	4712	28.0	D	4949	30.1	D	4724	28.1	D	4992	30.5	D
	Harding Boulevard to Blue Oaks Boulevard	3	4345	25.2	С	4802	28.8	D	4350	25.3	С	4819	29.0	D
I-80 WB	Atlantic Street to Taylor Road	4	6522	27.8	D	6758	29.3	D	6530	27.9	D	6812	29.6	D
1-00 WD		4	5598	27.8	C	6738	29.3	D	5609	27.9	C	6273	29.6	D
	Taylor Road to RTE 65 RTE 65 to Rocklin Road	3	4090	23.1	C	4736	26.0	D	4108	23.1	C	4854	27.4	D
	RTE 65 to Rocklin Road Rocklin Road to Sierra College Boulevard	3	4090	22.4	C	4736	23.5	C	4108	22.5	C	4834	24.3	C
-	Sierra College Boulevard to Horseshoe Bar Road	3	4640	25.7	C	4203	23.5	C	4625	25.9	D	4390	24.5	C
RTE 65 SB	I-80 to Harding Boulevard	3	4040	26.0	C	4000	21.9	C	4045	25.0	C	4036	22.1	C
KTE 05 5D	Harding Boulevard to Blue Oaks Boulevard	3	4297	24.9	C	3997	22.9	C	4304	23.0	C	4015	24.0	C
l	marking boulevalu to blue Oaks boulevafu	3	4300	∠4.9	U	5771	22.9	U	4303	∠+.7	U	4013	23.0	

Notes: Exceeds level of service criteria

Driveway Throat Length

As shown in the project site plan (Figure 2), the main project access driveway on Sierra College Boulevard will form the west leg of the I-80 westbound off-ramp intersection. The main access drive is approximately 270 feet in length prior to the first parking lot access.

To determine whether adequate throat distance is provided, LSA consulted the Access Management Manual, published by the Transportation Research Board. According to Table 10-8 in the Access Management Manual, the minimum throat length recommended for a driveway with two egress lanes is 75 feet. Approximately 270 feet is provided from Sierra College Boulevard to the first right-turn opportunity. This distance would exceed the recommendation in the Access Management Manual. As a result, no stacking of vehicles onto Sierra College Boulevard is expected.

Right Turns From Unsignalized Driveway

The project site plan includes one unsignalized driveway, located on Granite Drive at the northern end of the project site. The unsignalized driveway would allow right turns in, left turns in and right turns out only onto Granite Drive. Vehicles exiting the project site at this unsignalized driveway will have sufficient distance, prior to the intersection of Sierra College Boulevard/Granite Drive, to select the appropriate lane for their movement at that intersection. No impact to the circulation system is forecast as a result of this unsignalized driveway.

MITIGATION MEASURES

This report provides an analysis of the circulation impacts associated with development of the Rocklin Commons project. Mitigation measures for all project impacts have been identified in the document and are summarized below.

Existing Plus Approved Projects (Baseline) Plus Project

The following improvements would mitigate the impacts of the project in the existing plus approved projects (baseline) plus project conditions:

Rocklin Road/Granite Drive. The project would add traffic to this already-deficient location, which is operating at LOS E during the p.m. peak hour in the existing plus approved projects condition. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact.

Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS D during the a.m. peak hour and LOS F during the p.m. peak hour in the existing plus approved projects condition. The project also degrades the LOS at this intersection from LOS C to LOS E during the Saturday peak hour. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperatein construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Sierra College Boulevard/Brace Road (Loomis). The proposed project degrades traffic operations to unacceptable LOS during the p.m. peak hour and Saturday peak hour. Adding a second through lane in the northbound and southbound direction would mitigate this impact. Widening of Sierra College Boulevard is a partially funded project in the vicinity of the intersection with Brace Road and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis and is not yet funded. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements

contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Sierra College Boulevard/Granite Drive. The proposed project contributes to deficiencies in LOS during both the p.m. and Saturday peak hours. Adding a second through lane in the northbound and southbound direction would mitigate this impact. The southbound through lane can be implemented with restriping of existing pavement only. The existing "right turn only" lane would be converted to a shared "through/right turn" lane and there is existing improvement on the south side of the intersection to accept the second through lane.

The second northbound through lane can be implemented within existing pavement on the south side of the intersection. On the north side there is sufficient pavement for about 300 feet, however, there is not sufficient pavement for a transition from two lanes to one. This would require at least 300 feet of additional improvement.

Currently the City has jurisdiction over the south leg and only approximately 300 feet on the north leg along Sierra College Boulevard. Town of Loomis has jurisdiction north of that. Because the Town of Loomis' approval is required to implement this improvement, and because the City uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEOA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation. The widening of Sierra College Boulevard to construct two through lanes in each direction is a partially funded project in the vicinity of the intersection with Granite Drive and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis and is not yet fully funded.

Sierra College Boulevard/Rocklin Road. The project would add traffic to this already-deficient location, which is operating at LOS F during the p.m. and Saturday peak hours in the existing plus approved projects condition. Adding a northbound left-turn lane (resulting in dual left-turn lanes) and an exclusive southbound right-turn lane would mitigate the project impact at this location. There is an approved, not-yet-built project that is obligated to improve this intersection which includes construction of a second northbound left-turn lane and an exclusive southbound right-turn lane, and if that project completes this improvement prior to the proposed project, then this project (Rocklin Commons) will not have any obligations.

Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location which is operating at LOS E during the p.m. peak hour in the existing plus approved projects (baseline) condition. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Table X shows the mitigated LOS at the study locations.

The Sierra College Boulevard segment between Dominguez Road and Rocklin Road is projected to operate at unacceptable level of service (LOS D) in the Existing plus Approved plus Project scenario for the p.m. peak hour. Adding a second through lane in the northbound and southbound direction would mitigate this impact. The widening of Sierra College Boulevard is a partially funded project in the vicinity of the intersection with Granite Drive and is part of a much larger project (Sierra College Boulevard Widening Project – Phase I south of the I-80 interchange to El Don Drive and Phase II north of the interchange between I-80 and Taylor Road). Phase 1 of the project is entirely within the City of Rocklin and is already included in its CIP, while Phase 2 of the project is mostly in Town of Loomis. Even though the Phase 2 is included in the Town of Loomis' Capital Improvement Program it is not funded. Per City of Rocklin staff, funding for Phase 2 has only been secured for design which is currently underway. Funding for construction has not been secured and has several hurdles to overcome before the construction money can be approved by SPRTA Board. The project applicant should participate in this improvement by paying the traffic impact fee.

Table X: Existing Plus Approved Projects (Baseline) Plus Project Condition Peak Hour Intersection Level of Service Summary - With Mitigation

			Existing	Plus Approved Plus	Project (Condition		Existing	Plus App	proved Plus Project (Condition	1 - With mitigation	
		AM Peak Ho	ur	PM Peak Ho	ur	Saturday		AM Peak Ho	ur	PM Peak Ho	ur	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.976	Е	1.051	F	0.753	С	0.976	Е	1.051	F	0.753	С
2 Rocklin Road/Granite Drive	Signalized	0.540	Α	0.985	Е	0.717	С	0.540	Α	0.894	D	0.717	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	23.3 sec	С	40.6 sec	D	26.3 sec	С	23.3 sec	С	40.6 sec	D	26.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	32.7 sec	С	46.4 sec	D	16.4 sec	В	32.7 sec	С	46.4 sec	D	16.4 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.436	Α	0.504	А	0.336	А	0.436	Α	0.504	А	0.336	А
6 Dominguez Road/Granite Drive ¹	Unsignalized	12.9 sec	В	17.6 sec	С	15.2 sec	В	12.9 sec	В	17.6 sec	С	15.2 sec	В
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.888	D	1.211	F	0.891	D	0.845	D	1.084	F	0.792	С
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.677	В	1.029	F	0.832	D	0.400	А	0.652	В	0.512	А
9 Sierra College Boulevard/Granite Drive	Signalized	0.852	D	1.206	F	1.218	F	0.608	В	0.853	D	0.907	Е
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	15.5 sec	В	28.5 sec	С	34.3 sec	С	15.5 sec	В	28.5 sec	С	34.3 sec	С
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	14.7 sec	В	25.3 sec	С	39.7 sec	D	14.7 sec	В	25.3 sec	С	39.7 sec	D
12 Sierra College Boulevard/Dominguez Road	-	0.262	А	0.517	А	0.482	А	0.262	А	0.517	А	0.482	Α
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.873	D	1.234	F	1.135	F	0.686	В	1.019	F	0.980	Е
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.824	D	1.008	F	0.783	С	0.767	С	0.921	Е	0.701	С
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	20.1 sec	С	21.7 sec	С	22.4 sec	С	20.1 sec	С	21.7 sec	С	22.4 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹ (Loomis)	Unsignalized	16.7 sec	С	16.7 sec	С	12.8 sec	В	16.7 sec	С	16.7 sec	С	12.8 sec	В
17 Barton Road/Brace Road 1 (Loomis)	Unsignalized	17.1 sec	С	17.8 sec	С	10.5 sec	В	17.1 sec	С	17.8 sec	С	10.5 sec	В
18 Barton Road/Rocklin Road ¹ (Loomis)	Unsignalized	17.4 sec	С	13.4 sec	В	12.7 sec	В	17.4 sec	С	13.4 sec	В	12.7 sec	В
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.551	Α	0.765	С	0.590	А	0.551	А	0.765	С	0.590	Α
20 Sierra College Boulevard/English Colony Way ¹ (Placer County)	Unsignalized	11.8 sec	В	17.5 sec	С	13.6 sec	В	11.8 sec	В	17.5 sec	С	13.6 sec	В
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.800	С	0.785	С	0.616	В	0.800	С	0.785	С	0.616	В
22 Granite Drive/Project Driveway #2	-	0.108	Α	0.200	Α	0.193	А	0.108	А	0.200	А	0.193	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

Mitigated condition

(Shade) = Significant Impact

2025 Plus Project Without Dominguez Road

The following improvements would mitigate the impacts of the project in the 2025 plus project without Dominguez Road conditions:

• Rocklin Road/Granite Drive. The project would add traffic to this already-deficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project Without Dominguez Road scenario. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.

Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project Without Dominguez Road scenario. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate construction of the contemplated improvement within a reasonable period of time (i.e., prior to the issuance of occupancy permits), the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location in the p.m. peak hour and degrades traffic operations to unacceptable LOS during the Saturday peak hour. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the

City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

- Barton Road/Rocklin Road (Loomis). The proposed project adds traffic to this already-deficient location in the a.m. peak hour and degrades to unacceptable LOS during the p.m. peak hour. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project Without Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. To mitigate the project contribution of traffic at this intersection, the project should participate on a fair-share basis in the installation of a traffic signal at Barton Road/Rocklin Road. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/English Colony Way (Placer County). This intersection is operating at an unsatisfactory LOS during the a.m., p.m., and Saturday peak hours in the no project condition. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project Without Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would mitigate the project impact at this location. Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County's CIP will ensure that any fair-share payment will actually result in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as significant and unavoidable, given that the City has no control over the County and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation.

Table Y shows the mitigated LOS at the study locations.

Table Y: 2025 Plus Project without Dominguez Road Condition Peak Hour Intersection Level of Service Summary - With Mitigation

		202	5 Plus Pr	oject without Domin	nguez Ro	ad Condition		2025 Plus Pr	oject wit	hout Dominguez Roa	d Condi	tion - With Mitigati	on
		AM Peak Ho	ur	PM Peak Ho	ur	Saturday		AM Peak Ho	ur	PM Peak Hou	ır	Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street 1	Signalized	0.777	С	0.844	D	0.623	В	0.777	С	0.844	D	0.623	В
2 Rocklin Road/Granite Drive	Signalized	0.700	С	1.024	F	0.744	С	0.700	С	0.951	Е	0.744	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.7 sec	С	50.0 sec	D	32.3 sec	С	26.7 sec	С	50.0 sec	D	32.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	50.7 sec	D	42.0 sec	D	16.7 sec	В	50.7 sec	D	42.0 sec	D	16.7 sec	В
5 Dominguez Road/Pacific Street 1	Signalized	0.600	Α	0.784	С	0.438	Α	0.600	Α	0.784	С	0.438	А
6 Dominguez Road/Granite Drive ¹	Unsignalized	13.6 sec	В	22.3 sec	С	13.0 sec	В	13.6 sec	В	22.3 sec	С	13.0 sec	В
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	1.048	F	1.042	F	0.685	В	0.998	Е	0.929	Е	0.605	В
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.613	в	0.799	С	0.480	А	0.613	В	0.799	С	0.480	А
9 Sierra College Boulevard/Granite Drive	Signalized	0.748	С	0.763	С	0.746	С	0.748	С	0.763	С	0.746	С
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	12.2 sec	В	50.0 sec	D	48.5 sec	D	12.2 sec	В	50.0 sec	D	48.5 sec	D
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	15.4 sec	В	25.2 sec	С	31.2 sec	С	15.4 sec	В	25.2 sec	С	31.2 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.563	Α	0.785	С	0.729	С	0.563	А	0.785	С	0.729	С
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.909	Е	0.822	D	0.568	А	0.909	Е	0.822	D	0.568	А
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.982	Е	1.023	F	0.781	D	0.901	Е	0.938	Е	0.698	В
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.8 sec	С	21.5 sec	С	22.6 sec	С	22.8 sec	С	21.5 sec	С	22.6 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹² (Loomis)	Unsignalized	34.1 sec	D	27.6 sec	D	17.5 sec	С	34.1 sec	D	27.6 sec	D	17.5 sec	С
17 Barton Road/Brace Road ¹² (Loomis)	Unsignalized	109.5 sec	F	81.0 sec	F	13.4 sec	В	109.5 sec	F	81.0 sec	F	13.4 sec	В
18 Barton Road/Rocklin Road 12 (Loomis)	Unsignalized	407.3 sec	F	28.6 sec	D	24.5 sec	С	0.562	А	0.729	С	0.599	А
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.734	С	0.869	D	0.559	А	0.734	С	0.869	D	0.559	А
20 Sierra College Boulevard/English Colony Way 12 (Placer County)	Unsignalized	354.0 sec	F	987.2 sec	F	55.1 sec	F	0.636	В	0.825	D	0.483	Α
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.990	Е	0.629	В	0.711	С	0.990	Е	0.629	В	0.711	С
22 Granite Drive/Project Driveway #2	-	0.218	А	0.349	А	0.245	А	0.218	А	0.349	А	0.245	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Mitigated condition

(Shade) = Significant Impact

2025 Plus Project With Dominguez Road

The following improvements would mitigate the impacts of the project in the 2025 plus project with Dominguez Road conditions:

- **Rocklin Road/Granite Drive.** The proposed project would add traffic to this already-deficient location, which operates at LOS F during the p.m. peak hour in the 2025 no project with Dominguez Road scenario. Changing the signal phasing by adding a southbound right-turn overlap phase (southbound right-turn green arrow during the eastbound left-turn green arrow) would mitigate the project impact. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.
- Sierra College Boulevard/Taylor Road (Loomis). The project would add traffic to this alreadydeficient location, which is operating at LOS E during the p.m. peak hour in the 2025 no project with Dominguez Road scenario. Adding a westbound left-turn lane (resulting in dual left-turn lane) would mitigate the project impact. The dual westbound left-turn lanes can be accommodated within the existing right-of-way by restriping the exclusive westbound through and right-turn lanes to a through right lane. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/Dominguez Road. The proposed extension of Dominguez Road will create a deficiency during the Saturday peak hour at this intersection in the 2025 no project with Dominguez scenario. The proposed intersection striping will not be sufficient to accommodate project traffic in the 2025 with Dominguez Road scenario. However, if the currently proposed lane configuration were restriped to accommodate dual southbound left-turn lanes and two southbound through lanes at the time of its construction, then the intersection would operate at a satisfactory LOS. This configuration can exist in the same right-of-way currently planned for this intersection. The project applicant shall pay a traffic impact fee in an amount that constitutes the project's fair-share contribution to the construction of the proposed improvement as part of the City's development review process, consistent with the City's CIP program, SPRTA program, or other applicable funding program.
- Horseshoe Bar Road/Taylor Road (Loomis). The proposed project adds traffic to this alreadydeficient location in the p.m. peak hour and degrades traffic operations to unacceptable LOS during the Saturday peak hour. Adding a northbound right-turn lane from Taylor Road to Horseshoe Bar Road would mitigate the project impact at this location. The northbound right-turn lane can be accommodated within the existing improvements. On Taylor Road northbound there is a 27 foot curb lane that accommodates a through lane and some on-street parking. Approaching Horseshoe Bar Road the parking could be restriped about 100 feet before the intersection and a "Right Turn Only" lane striped. This would formalize an exclusive right turn lane increasing

capacity, that does occasionally occur at this time without the striping. Parking for about three vehicles will be displaced. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.

- Horseshoe Bar Road/I-80 Eastbound Ramps (Loomis). The proposed project would degrade traffic operations to unacceptable LOS during the p.m. peak hour in the 2025 with Dominguez Road extension scenario. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate in construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- **Barton Road/Rocklin Road (Loomis).** The proposed project adds traffic to this already-deficient location in the a.m. peak hour and degrades traffic operations to unacceptable LOS during the p.m. peak hour. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would result in a satisfactory LOS. Because the Town of Loomis controls what occurs at the intersection, however, and because the City is uncertain as to whether the Town would be willing to cooperate construction of the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the Town of Loomis and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the Town of Loomis can and should cooperate with the City in implementing the mitigation.
- Sierra College Boulevard/English Colony Way (Placer County). This intersection is operating at an unsatisfactory LOS during the a.m., p.m., and Saturday peak hours in the no project condition. The intersection is forecast to meet the peak-hour traffic signal warrant in the 2025 no project with Dominguez Road extension scenario. The intersection would continue to meet the peak-hour traffic signal warrant with the addition of project traffic. Signalization of this intersection would mitigate the project impact at this location. Because the County of Placer controls what occurs at the intersection, however, and because the City is uncertain as to whether the County's CIP will ensure that any fair-share payment will actually result in construction of

the contemplated improvement within a reasonable period of time, the City conservatively concludes that, at the time of action by its City Council, the impact would be treated as **significant and unavoidable**, given that the City has no control over the County and thus cannot take for granted that the improvements contemplated by the mitigation will get implemented. Consistent with CEQA Guidelines Section 15091, subdivision (a)(2), the City concludes, however, that the County can and should cooperate with the City in implementing the mitigation.

Table Z shows the mitigated LOS at the study locations.

Table Z: 2025 Plus Project with Dominguez Road Condition Peak Hour Intersection Level of Service Summary - With Mitigation

		2025 Plus Project with Dominguez Road Condition						2025 Plus Project with Dominguez Road Condition - With Mitigation					
		AM Peak Hour		PM Peak Hour		Saturday		AM Peak Hour		PM Peak Hour		Saturday	
Intersection	Control Type	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS
1 Rocklin Road/Pacific Street ¹	Signalized	0.781	С	0.841	D	0.618	В	0.781	С	0.841	D	0.618	В
2 Rocklin Road/Granite Drive	Signalized	0.704	С	1.067	F	0.729	С	0.687	В	0.917	Е	0.729	С
3 Rocklin Road/I-80 Westbound Ramps	Signalized	26.3 sec	С	44.2 sec	D	28.3 sec	С	26.3 sec	С	44.2 sec	D	28.3 sec	С
4 Rocklin Road/I-80 Eastbound Ramps	Signalized	46.6 sec	D	37.6 sec	D	15.2 sec	В	46.6 sec	D	37.6 sec	D	15.2 sec	В
5 Dominguez Road/Pacific Street ¹	Signalized	0.609	В	0.842	D	0.454	Α	0.609	В	0.842	D	0.454	А
6 Dominguez Road/Granite Drive ¹	Signalized	0.515	А	0.609	В	0.553	А	13.9 sec	В	25.9 sec	D	0.553	С
7 Sierra College Boulevard/Taylor Road ¹ (Loomis)	Signalized	0.991	Е	1.032	F	0.684	В	0.946	Е	0.932	Е	0.605	В
8 Sierra College Boulevard/Brace Road ¹ (Loomis)	Signalized	0.596	А	0.790	С	0.473	А	0.596	А	0.790	С	0.473	Α
9 Sierra College Boulevard/Granite Drive	Signalized	0.705	С	0.708	С	0.687	В	0.705	С	0.708	С	0.687	В
10 Sierra College Boulevard/I-80 Westbound Ramps	Signalized	12.3 sec	В	53.5 sec	D	46.5 sec	D	12.3 sec	В	53.5 sec	D	46.5 sec	D
11 Sierra College Boulevard/I-80 Eastbound Ramps	Signalized	13.1 sec	В	26.2 sec	С	28.4 sec	С	13.1 sec	В	26.2 sec	С	28.4 sec	С
12 Sierra College Boulevard/Dominguez Road	-	0.577	А	0.860	D	0.921	Е	0.770	С	0.853	D	0.815	D
13 Sierra College Boulevard/Rocklin Road ¹	Signalized	0.877	D	0.795	С	0.558	А	0.877	D	0.795	С	0.558	Α
14 Horseshoe Bar Road/Taylor Road ¹ (Loomis)	Signalized	0.966	Е	1.017	F	0.772	С	0.883	D	0.936	Е	0.693	В
15 Horseshoe Bar Road/I-80 Westbound Ramps ¹ (Loomis)	Signalized	22.7 sec	С	21.5 sec	С	22.6 sec	С	22.7 sec	С	21.5 sec	С	22.6 sec	С
16 Horseshoe Bar Road/I-80 Eastbound Ramps ¹² (Loomis)	Unsignalized	31.9 sec	D	25.9 sec	D	16.9 sec	С	0.573	А	0.618	В	0.496	А
17 Barton Road/Brace Road ¹² (Loomis)	Unsignalized	96.2 sec	F	76.1 sec	F	13.3 sec	В	96.2 sec	F	76.1 sec	F	13.3 sec	В
18 Barton Road/Rocklin Road ¹² (Loomis)	Unsignalized	383.6 sec	F	30.6 sec	D	26.0 sec	D	0.556	А	0.731	С	0.594	Α
19 Sierra College Boulevard/King Road ¹ (Loomis)	Signalized	0.715	С	0.867	D	0.559	А	0.715	С	0.867	D	0.559	А
20 Sierra College Boulevard/English Colony Way ¹² (Placer County)	Unsignalized	336.6 sec	F	*	F	58.1 sec	F	0.631	В	0.829	D	0.487	А
21 Taylor Road/King Road ¹ (Loomis)	Signalized	0.989	Е	0.624	В	0.715	С	0.989	Е	0.624	В	0.715	С
22 Granite Drive/Project Driveway #2	-	0.201	А	0.310	А	0.223	Α	0.201	А	0.310	А	0.223	Α

Notes:

ICU critical V/C ratio is used for signalized intersections. HCM delay in seconds is used for unsignalized intersections.

¹ LOS C required for these intersections. LOS D acceptable for all other intersections.

² Peak Hour volumes meet Signal Warrant #3 of the MUTCD

* Delay exceeds 1000 seconds

Mitigated condition

(Shade) = Significant Impact

(onade) = organizeant mip

APPENDIX A

TRAFFIC COUNTS

APPENDIX B

EXISTING LOS WORKSHEETS

APPENDIX C

EXISTING PLUS PROJECT LOS WORKSHEETS

APPENDIX D

APPROVED PROJECTS LIST

APPENDIX E

EXISTING PLUS APPROVED PROJECT LOS WORKSHEETS

APPENDIX F

EXISTING PLUS APPROVED PROJECTS PLUS PROJECT LOS WORKSHEETS

APPENDIX G

YEAR 2025 NO PROJECT (WITHOUT DOMINGUEZ ROAD) TRAFFIC VOLUME DEVELOPMENT AND LOS WORKSHEETS

APPENDIX H

YEAR 2025 PLUS PROJECT (WITHOUT DOMINGUEZ ROAD) LOS WORKSHEETS

APPENDIX I

YEAR 2025 NO PROJECT (WITH DOMINGUEZ ROAD) TRAFFIC VOLUME DEVELOPMENT AND LOS WORKSHEETS

APPENDIX J

YEAR 2025 PLUS PROJECT (WITH DOMINGUEZ ROAD) LOS WORKSHEETS

APPENDIX K

EXISTING PLUS APPROVED AND EXISTING PLUS APPROVED PLUS PROJECT

FREEWAY SEGMENTS – HCS ANALYSIS

APPENDIX L

YEAR 2025 WITHOUT DOMINGUEZ ROAD (WITHOUT AND PLUS PROJECT)

FREEWAY SEGMENTS - HCS ANALYSIS

APPENDIX M

YEAR 2025 WITH DOMINGUEZ ROAD (WITHOUT AND PLUS PROJECT)

FREEWAY SEGMENTS - HCS ANALYSIS