3.14 TRAFFIC AND TRANSPORTATION

This chapter presents the results of the transportation impact analysis (TIA) prepared by Fehr & Peers Transportation Consultants (Fehr & Peers) for implementation of development Phase 1 and full buildout of the Rio del Oro Specific Plan. Because of the large volume of raw data generated during traffic counts and modeling analyses conducted in support of the traffic analysis, it is not feasible to provide these data as an appendix to this draft environmental impact report/environmental impact statement (DEIR/DEIS). However, the data are available for review at the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, CA 95670.

Development of the Rio del Oro Specific Plan, also referred to as the "project," would not be completed until the year 2030. The Rio del Oro Specific Plan area, other areas of Rancho Cordova, and cities and communities throughout Sacramento County are expected to experience significant growth over this period. Major projects have been entitled for development throughout the region, and more are expected. As projects develop, traffic will increase on local and regional roadways and freeways. As regional development proceeds, transportation system improvements will be provided through local and regional funding programs, individual project mitigation, and improvements funded by the California Department of Transportation (Caltrans).

The Sacramento region is conducting its Blueprint process to aid decision makers in understanding the effects of current planning procedures (see Section 3.1, "Land Use," for further information regarding the Sacramento Area Council of Governments [SACOG] Blueprint). Through the Blueprint process, a preferred alternative has been adopted for the region that increases development densities in areas outside downtown Sacramento, such as Rancho Cordova, to limit sprawl, minimize dependence on the single-occupant automobile, and reduce trip lengths throughout the region. However, for the purposes of this DEIR/DEIS, current development trends in the region (outside of Rancho Cordova) have been assumed, providing a "worst-case" scenario for identifying transportation impacts in the project study area.

As part of the traffic analysis, the following preliminary analyses were conducted to provide a basis for comparison of project-related traffic impacts:

- **Existing conditions analysis.** Existing roadway operations were analyzed using existing roadway geometrics and existing volumes obtained from traffic count data.

- **Baseline conditions analysis.** The existing roadway conditions described above ("existing conditions") were analyzed with the addition of traffic expected from projects that City of Rancho Cordova (City) staff members have identified as having already received tentative map approval (such as the Villages of Zinfandel), as well as traffic generated by development of up to 6,500 units in the SunRidge Specific Plan area. This "baseline conditions" analysis incorporates roadway improvements that are currently under construction or are consistent with approved projects. The use of these baseline conditions for the assessment of project-related impacts is appropriate and conservative under the California Environmental Quality Act (CEQA) because it does not include hypothetical, speculative, or unapproved projects. It does include approved projects that have obtained necessary discretionary approvals, but have not yet begun to generate the traffic that is the foreseeable consequence of existing discretionary approvals.

- **Cumulative conditions analysis.** Roadway conditions that are projected to occur in the year 2030, when full buildout of the Rio del Oro Specific Plan area is expected, were also analyzed. This planning horizon incorporates roadway improvement projects associated with assumed development projects in the area, as identified by the City; Tier I projects identified in the SACOG *Metropolitan Transportation Plan for 2025* (MTP 2025) that are outside the city limits; and additional improvements identified by the City that would be required pursuant to the City's capital improvement program (CIP).

Although there is a reasonable expectation that future roadway system improvements would be provided as planned, these improvements remain largely dependent on fees generated by the development that would affect the roadways. The likelihood that planned developments would proceed can be forecasted but not predicted with

certainty. The same is true of the timing of these developments. Consequently, this traffic analysis evaluates development impacts under the scenarios described below.

- **Baseline Plus Phase 1.** This scenario assumes the baseline conditions described above with the addition of traffic that would be generated at buildout of development Phase 1 of the project, which is projected to occur in the year 2014.

- **Baseline Plus Full Project Buildout.** This scenario assumes the baseline conditions described above with the addition of traffic that would be generated at full buildout of the Rio del Oro Specific Plan area, which is projected to occur in the year 2030.

- **Cumulative Plus Full Project Buildout.** This scenario assumes an improved roadway system and increased traffic, based on projected regional and local growth, regional and local traffic plans, traffic fee programs, and known commitments to improve the traffic network (the "cumulative conditions" analysis described above). This improved roadway condition is evaluated for the year 2030, which is the year when full buildout of the Rio del Oro Specific Plan area is expected to completed.

These three conditions represent the reasonably foreseeable range of possible roadway scenarios that could be in place as the project develops over time.

Several additional traffic scenarios, described below, were evaluated for informational purposes only and were intended to aid in the financing plan for the project (if approved). Because these scenarios do not include an analysis of project impacts, they are provided as Appendix I to this DEIR/DEIS.

- **2014 with Phase 1.** This scenario incorporates a near-term planning horizon that consists of traffic volumes from expected development through the year 2014 plus traffic from development Phase 1 of the project. The scenario incorporates roadway improvements consistent with Tier I projects identified for completion in the MTP 2025 by year 2014, with minor modifications from County of Sacramento (County) staff members.

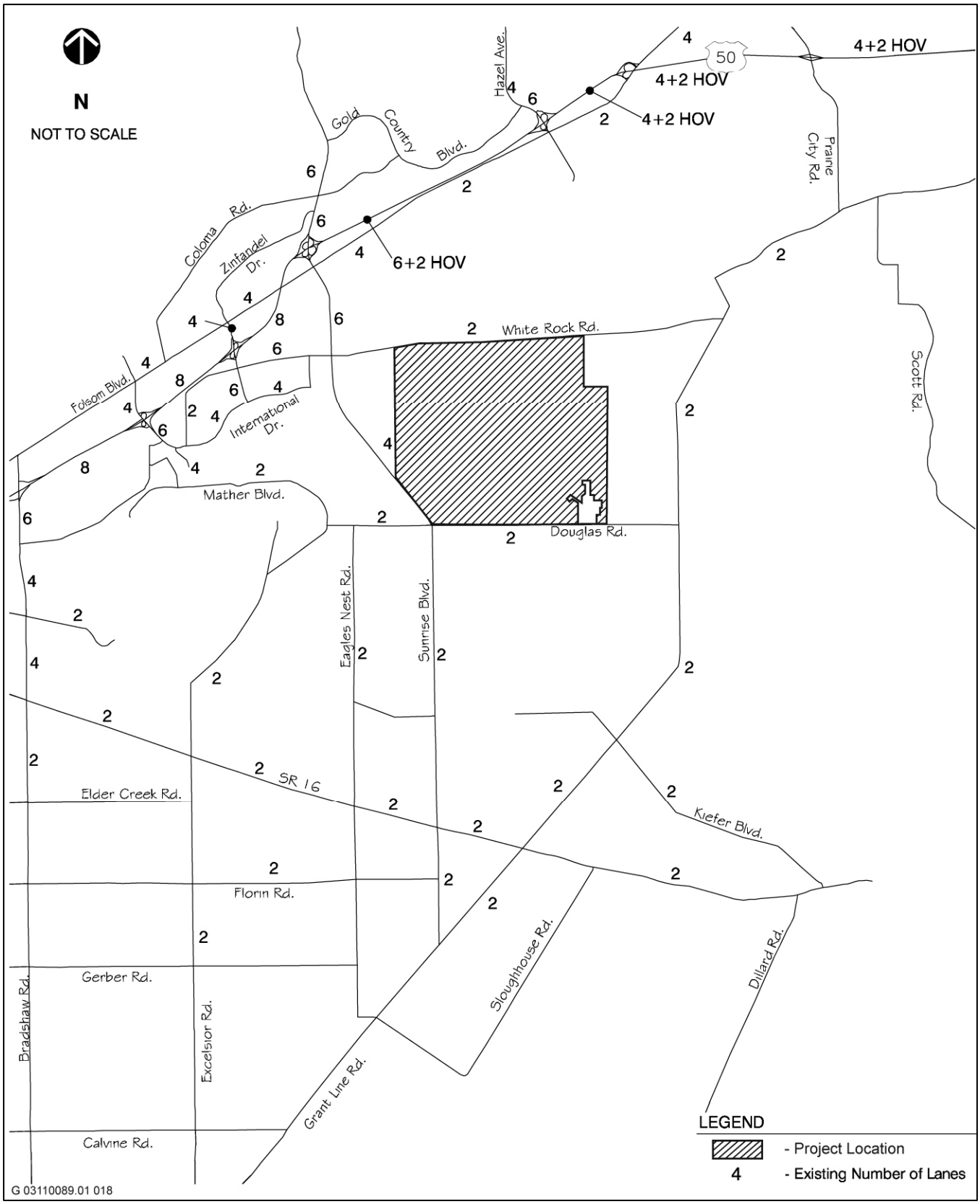
- **2014 with Specific Plan Buildout.** This scenario incorporates a second, near-term planning horizon that consists of traffic volumes from expected development over the next 10 years plus full buildout of the Rio del Oro Specific Plan.

- **Additional cumulative-analysis scenarios corresponding to MTP 2025 Tier I roadway improvement projects only, both inside and outside the city limits.** These scenarios were used to identify roadway operations that would occur only if the City's proposed CIP were not implemented; they are not part of this DEIR/DEIS analysis.

3.14.1 AFFECTED ENVIRONMENT

The site location and surrounding roadway network are shown in Exhibit 3.14-1. The project site is in the City of Rancho Cordova, and is generally bounded by White Rock Road to the north, Douglas Road to the south, and Sunrise Boulevard to the west. Grant Line Road is approximately 0.75 mile to the east. The Phase 1 development area is the western 1,100-acre portion of the project site located along Rancho Cordova Parkway. Exhibit 2-12 in Chapter 2, "Alternatives," shows the project site (including the Phase 1 development area) and the project site roadway network.

Detailed traffic analyses were performed for the intersections, roadway segments, freeway facilities, and interchanges shown in Table 3.14-1.



Source: Fehr & Peers 2006

Existing Roadway Network

EXHIBIT 3.14-1

Rio del Oro Specific Plan Project DEIR/DEIS
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EDAW

Table 3.14-1
Locations of Detailed Traffic Analyses

Intersections

1. SR 16/Excelsior Road
2. SR 16/Eagles Nest Road
3. SR 16/Sunrise Boulevard
4. SR 16/Grant Line Road
5. Florin Road/Sunrise Boulevard
6. Grant Line Road/Sunrise Boulevard
7. Grant Line Road/Kiefer Boulevard
8. Douglas Road/Grant Line Road
9. Douglas Road/Sunrise Boulevard
10. Mather Field Road/Folsom Boulevard
11. Mather Field Road/U.S. 50 westbound ramps
12. Mather Field Road/U.S. 50 eastbound ramps
13. Mather Field Road/International Drive
14. Zinfandel Drive/International Drive
15. Zinfandel Drive/White Rock Road
16. Zinfandel Drive/U.S. 50 eastbound ramps
17. Zinfandel Drive/U.S. 50 westbound ramps
18. Sunrise Boulevard/White Rock Road
19. Sunrise Boulevard/Folsom Boulevard
20. Sunrise Boulevard/U.S. 50 eastbound ramps
21. Sunrise Boulevard/U.S. 50 westbound ramps
22. Sunrise Boulevard/Zinfandel Drive
23. Hazel Avenue/Folsom Boulevard
24. Hazel Avenue/U.S. 50 eastbound ramps
25. Hazel Avenue/U.S. 50 westbound ramps
26. White Rock Road/Grant Line Road
27. Kilgore Road/White Rock Road
28. Hazel Avenue/Gold Country Boulevard
29. Sunrise Boulevard/Kiefer Boulevard—2014 and cumulative scenarios only
30. Eagles Nest Road/Kiefer Boulevard—2014 and cumulative scenarios only
31. Sunrise Boulevard/International Drive—2014 and cumulative scenarios only
32. Rancho Cordova Parkway/White Rock Road—cumulative scenario only
33. Rancho Cordova Parkway/U.S. 50 eastbound ramps—cumulative scenario only
34. Rancho Cordova Parkway/U.S. 50 westbound ramps—cumulative scenario only
35. Douglas Road/Jaeger Road—cumulative scenario only
36. Douglas Road/Americanos Boulevard—cumulative scenario only
37. Chrysanthy Boulevard/Sunrise Boulevard—cumulative scenario only
38. Chrysanthy Boulevard/Jaeger Road—cumulative scenario only
39. Chrysanthy Boulevard/Americanos Boulevard—cumulative scenario only
40. Kiefer Boulevard/Jaeger Road—cumulative scenario only
41. White Rock Road/Americanos Boulevard—cumulative scenario only

Roadways

1. SR 16—Excelsior Road to Eagles Nest Road
2. SR 16—Sunrise Boulevard to Grant Line Road
3. Kiefer Boulevard—Grant Line Road to SR 16
4. Mather Boulevard—Femoyer Street to Douglas Road
5. Douglas Road—Mather Boulevard to Sunrise Boulevard
6. Douglas Road—Sunrise Boulevard to Grant Line Road
7. International Drive—South White Rock Road to Zinfandel Drive
8. International Drive—Zinfandel Drive to Kilgore Road
9. White Rock Road—Zinfandel Drive to Sunrise Boulevard
10. Zinfandel Drive—Folsom Boulevard to U.S. 50 westbound ramps
11. Zinfandel Drive—U.S. 50 eastbound ramps to White Rock Road
12. Zinfandel Drive—White Rock Road to International Drive
13. Sunrise Boulevard—Gold Country Boulevard to Coloma Road
14. Sunrise Boulevard—Coloma Road to U.S. 50 westbound ramps
15. White Rock Road—Sunrise Boulevard to Grant Line Road
16. Folsom Boulevard—Zinfandel Drive to Sunrise Boulevard
17. Folsom Boulevard—Sunrise Boulevard to Hazel Avenue
18. Mather Field Road—Folsom Boulevard to U.S. 50 westbound ramps
19. Mather Field Road—U.S. 50 eastbound ramps to International Drive
20. Pyramid Boulevard—Sunrise Boulevard to Jaeger Road—cumulative scenario only
21. Pyramid Boulevard—Jaeger Road to Americanos Boulevard—cumulative scenario only
22. Kiefer Boulevard—Eagles Nest Road to Sunrise Boulevard—cumulative scenario only
23. Kiefer Boulevard—Sunrise Boulevard to Jaeger Road—cumulative scenario only
24. Eagles Nest Road—Mather Boulevard to Douglas Road—cumulative scenario only

Table 3.14-1
Locations of Detailed Traffic Analyses

Roadways (Continued)

25. Sunrise Boulevard—U.S. 50 eastbound ramps to Folsom Boulevard
26. Sunrise Boulevard—Folsom Boulevard to White Rock Road
27. Sunrise Boulevard—White Rock Road to Douglas Road
28. Sunrise Boulevard—Douglas Road to SR 16
29. Sunrise Boulevard—SR 16 to Grant Line Road
30. Hazel Avenue—U.S. 50 westbound ramps to Winding Way
31. Grant Line Road—White Rock Road to Douglas Road
32. Grant Line Road—Douglas Road to SR 16
33. Grant Line Road—SR 16 to Sunrise Boulevard
34. Douglas Road—Sunrise Boulevard to Jaeger Road—baseline, 2014, and cumulative scenarios only
35. Douglas Road—Americanos Boulevard to Grant Line Road—baseline, 2014, and cumulative scenarios only
36. Sunrise Boulevard—Douglas Road to Kiefer Boulevard—baseline, 2014, and cumulative scenarios only
37. Sunrise Boulevard—Kiefer Boulevard to SR 16—baseline, 2014, and cumulative scenarios only
38. Douglas Road—Jaeger Road to Americanos Boulevard—cumulative scenario only
39. Eagles Nest Road—Douglas Road to Kiefer Boulevard—cumulative scenario only
40. Eagles Nest Road—Kiefer Boulevard to SR 16—cumulative scenario only
41. Sunrise Boulevard—Douglas Road to Pyramid Boulevard—cumulative scenario only
42. Sunrise Boulevard—Pyramid Boulevard to Kiefer Boulevard—cumulative scenario only
43. Sunrise Boulevard—Kiefer Boulevard to SR 16—cumulative scenario only
44. Rancho Cordova Parkway—U.S. 50 to White Rock Road—cumulative scenario only
45. Rancho Cordova Parkway—White Rock Road to Douglas Road—cumulative scenario only
46. Jaeger Road—Douglas Road to Pyramid Boulevard—cumulative scenario only
47. Jaeger Road—Pyramid Boulevard to Kiefer Boulevard—cumulative scenario only
48. Americanos Boulevard—White Rock Road to Douglas Road
49. Americanos Boulevard—Douglas Road to Pyramid Boulevard

Freeway Segments

1. U.S. 50—Mather Field Road to Zinfandel Drive
2. U.S. 50—Zinfandel Drive to Sunrise Boulevard
3. U.S. 50—Sunrise Boulevard to Hazel Avenue
4. U.S. 50—Hazel Avenue to Folsom Boulevard
5. U.S. 50—Sunrise Boulevard to Rancho Cordova Parkway—2014 and cumulative scenarios
6. U.S. 50—Rancho Cordova Parkway to Hazel Avenue—2014 and cumulative scenarios

Interchanges

1. Mather Field Road interchange at U.S. 50
2. Zinfandel Drive interchange at U.S. 50
3. Sunrise Boulevard interchange at U.S. 50
4. Hazel Avenue interchange at U.S. 50
5. Rancho Cordova Parkway interchange at U.S. 50—2014 and cumulative scenarios

Notes: SR = State Route; U.S. 50 = U.S. Highway 50
Source: Data provided by Fehr & Peers in 2005

EXISTING ROADWAY NETWORK

Exhibit 3.14-1 shows the surface roadways in the vicinity of the project site and the number of lanes on each roadway. A brief description of each of the key roadways in the project study area is provided below.

U.S. Highway 50

U.S. Highway 50 (U.S. 50) extends eastward from downtown Sacramento into El Dorado County. U.S. 50 has four lanes in each direction from west of Bradshaw Road to Sunrise Boulevard. From Sunrise Boulevard to Hazel Avenue, it has three lanes in each direction plus a high-occupancy vehicle (HOV) lane. East of Hazel Avenue, U.S. 50 has three lanes, including HOV lanes, in each direction.

Sunrise Boulevard

Sunrise Boulevard is a major north-south secondary road that connects Grant Line Road to the city of Roseville. It has two lanes between Grant Line Road and Douglas Road, four lanes between Douglas Road and White Rock Road, and six lanes north of White Rock Road. The U.S. 50/Sunrise Boulevard interchange is an L-9 configuration with loop on-ramps in the northeast and southwest quadrants and diagonal ramps in all four quadrants. In the vicinity of the project site, the Circulation Element/Plan of the *Rancho Cordova General Plan* (City General Plan) designates this roadway as a six-lane major road.

White Rock Road

White Rock Road extends from International Drive to El Dorado County. It is a two-lane local road between International Drive and Zinfandel Drive, a six-lane secondary road between Zinfandel Drive and Sunrise Boulevard, and a two-lane roadway east of Sunrise Boulevard. In the vicinity of the project site, the Circulation Element/Plan of the City General Plan designates this roadway as a six-lane expressway.

Jackson Highway (State Route 16)

Jackson Highway, also known as State Route (SR) 16, is a two-lane highway that extends from Folsom Boulevard east of Howe Avenue into Amador County. In the vicinity of the project site, the Circulation Element/Plan of the City General Plan designates this roadway as a six-lane expressway.

Mather Field Road

Mather Field Road extends from the Mather Reuse Area to Folsom Boulevard. It has six lanes between International Drive and U.S. 50, and four lanes between U.S. 50 and Folsom Boulevard. The U.S. 50/Mather Field Road interchange is an L-9 configuration with loop on-ramps in the northeast and southwest quadrants and diagonal ramps in all four quadrants.

Douglas Road

Douglas Road is a two-lane roadway that extends from Mather Boulevard in the Mather Reuse Area to Grant Line Road. In the vicinity of the project site, the Circulation Element/Plan of the City General Plan designates this roadway as a six-lane major road.

Grant Line Road

Grant Line Road is a two-lane roadway that extends from SR 99 to White Rock Road through the southeastern portion of Sacramento County. In the vicinity of the project site, the Circulation Element/Plan of the City General Plan designates this roadway as a six-lane expressway.

Zinfandel Drive

Zinfandel Drive is a four-lane secondary road from International Drive to Sunrise Boulevard. The U.S. 50/Zinfandel Drive interchange is an L-9 configuration with loop on-ramps in the northeast and southwest quadrants and diagonal ramps in all four quadrants.

Hazel Avenue

Hazel Avenue is four-lane north-south secondary road through Sacramento County and into Placer County, where it becomes Sierra College Boulevard. The U.S. 50/Hazel Avenue interchange is an L-9 configuration with loop on-ramps in the northeast and southwest quadrants and diagonal ramps in all four quadrants.

Intersection lane configurations and traffic control devices for the existing roadway network were obtained during a field visit to the project study area in spring 2004. These lane configurations are shown in Exhibit 3.14-2.

EXISTING TRAFFIC VOLUMES

Fehr & Peers conducted traffic counts during the second quarter of 2003 and the first quarter of 2004, then again in November 2005, to determine average daily traffic (ADT) and a.m. and p.m. peak-period traffic volumes in the project study area. No changes in the existing conditions had occurred during the time between the two sets of traffic counts. Traffic counts were collected for all roadway segments and intersections in the project study area. The existing intersection volumes are shown in Exhibit 3.14-2. ADT volumes for existing roadways are presented in Exhibit 3.14-3.

EXISTING TRANSIT SERVICE

Sacramento Regional Transit (RT) operates bus and light-rail transit (LRT) service in Sacramento County. The existing transit services in the vicinity of the project site are described below and are shown in Exhibit 3.14-4.

Fixed-Route Bus Service

Fixed-route bus service is provided northwest of the project site. Routes 73 and 74 provide service along White Rock Road. Route 109 is operated along U.S. 50 during weekday peak periods only. The following describes these individual routes in greater detail.

- **Route 73** provides service between the Mather Field/Mills light-rail station and the Sunrise Boulevard light-rail station. Weekday service is provided between 6:05 a.m. and 7:45 p.m. on 60-minute headways. (A "headway" is the amount of time between buses. For example, if a bus on the same route arrives at a given stop every 60 minutes, it is operating on 60-minute headways.) Saturday service is provided between 7:30 a.m. and 6:20 p.m. on 60-minute headways. No Sunday or holiday service is provided.

- **Route 74** provides fixed-route service between the Mather Field/Mills light-rail Station and the Sunrise Boulevard light-rail station on weekdays only. The route operates between 5:50 a.m. and 8:20 p.m. on 60-minute headways. Saturday service is provided between 7:10 a.m. and 7:10 p.m. on 60-minute headways. No Sunday or holiday service is provided.

- **Route 109 (Hazel Express)** is an express bus route between Orangevale and downtown Sacramento. During the morning commute period, the route operates from 6:25 a.m. to 8 a.m. on approximately 30-minute headways in the westbound direction only. During the evening commute period, the route operates from 4:35 p.m. to 6:20 p.m. on 45- to 50-minute headways in the eastbound direction only.

Light-Rail Transit Service

LRT service is provided from downtown Sacramento along the U.S. 50 corridor to the Sunrise Boulevard light-rail station, which has a 489-space park-and-ride lot. An LRT extension eastward to the city of Folsom opened in late 2005.

EXISTING BICYCLE AND PEDESTRIAN SYSTEM

Bicycle and pedestrian facilities are limited near the project site. A Class I off-street bike path parallels Sunrise Boulevard from White Rock Road south to Grant Line Road along the Folsom South Canal. Sidewalks have been built along Sunrise Boulevard north and south of White Rock Road; however, there are no sidewalks along Sunrise Boulevard south of Refinement Road.

EXISTING TRAFFIC CONDITIONS

Existing operation of roadways, intersections, freeway facilities, and bicycle/pedestrian facilities in the project study area is discussed below.

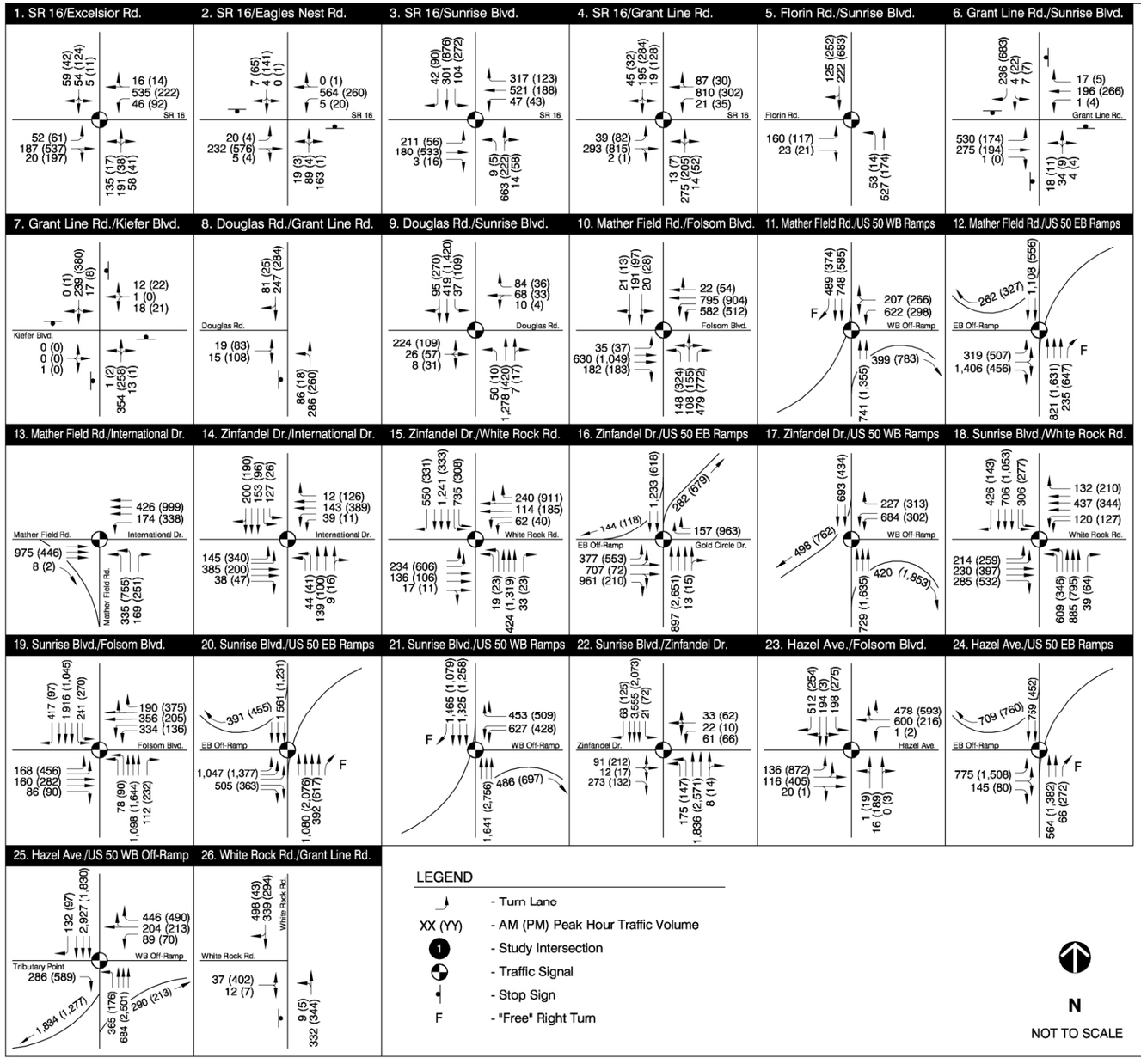
Study Intersections

The existing peak-hour traffic volumes, traffic control, and intersection lane configurations shown in Exhibit 3.14-2 were used to calculate levels of service (LOS) at the study intersections. Table 3.14-2 summarizes intersection LOS under existing conditions.

Table 3.14-2
Intersection Levels of Service—Existing Conditions

		A.M. Peak Hour		P.M. Peak Hour	
Intersection	Control	V/C[1] or Delay[2]	LOS	V/C or Delay	LOS
1. SR 16/Excelsior Road	Signalized	0.74	C	0.73	C
2. SR 16/Eagles Nest Road	Side-street stop	23	C	29	D
3. SR 16/Sunrise Boulevard	Signalized	1.01	F	0.97	E
4. SR 16/Grant Line Road	Signalized	1.00	E	1.04	F
5. Florin Road/Sunrise Boulevard	Signalized	0.44	A	0.69	B
6. Grant Line Road/Sunrise Boulevard	All-way stop	33	D	63	F
7. Grant Line Road/Kiefer Boulevard	All-way stop	10	A	10	B
8. Douglas Road/Grant Line Road	Side-street stop	13	B	14	B
9. Douglas Road/Sunrise Boulevard	Signalized	0.68	B	0.73	B
10. Mather Field Road/Folsom Boulevard	Signalized	0.71	A	0.92	E
11. Mather Field Road/U.S. 50 westbound ramps	Signalized	0.50	A	0.59	A
12. Mather Field Road/U.S. 50 eastbound ramps	Signalized	0.80	D	0.54	A
13. Mather Field Road/International Drive	Signalized	0.44	A	0.58	A
14. Zinfandel Drive/International Drive	Signalized	0.29	A	0.40	A
15. Zinfandel Drive/White Rock Road	Signalized	0.53	A	0.85	D
16. Zinfandel Drive/U.S. 50 eastbound ramps	Signalized	0.89	D	0.97	E
17. Zinfandel Drive/U.S. 50 westbound ramps	Signalized	0.44	A	0.52	A
18. Sunrise Boulevard/White Rock Road	Signalized	0.74	C	0.76	C
19. Sunrise Boulevard/Folsom Boulevard	Signalized	0.64	B	0.77	C
20. Sunrise Boulevard/U.S. 50 eastbound ramps[3]	Signalized	0.55	A	0.62	B
21. Sunrise Boulevard/U.S. 50 westbound ramps[3]	Signalized	0.54	A	0.73	C
22. Sunrise Boulevard/Zinfandel Drive	Signalized	1.03	F	1.80	F
23. Hazel Avenue/Folsom Boulevard	Signalized	0.66	B	0.78	C
24. Hazel Avenue/U.S. 50 eastbound ramps[3]	Signalized	0.49	A	0.64	B
25. Hazel Avenue/U.S. 50 westbound ramps[3]	Signalized	0.74	C	0.85	D
26. White Rock Road/Grant Line Road	Side-street stop	18	C	> 50	F
27. White Rock Road/Kilgore Road	Signalized	0.59	A	0.71	C
28. Hazel Avenue/Gold Country Boulevard	Signalized	0.89	D	0.85	D

Notes: LOS = level of service; SR = State Route; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity
[1] V/C ratio is shown for signalized intersections.
[2] Worst-case delay reported for unsignalized, side-street-stop intersections; average intersection delay reported for all-way-stop intersections. Both delays are reported in seconds per vehicle.
[3] Operations are worse at these ramp terminal intersections than reflected in the LOS analysis. LOS is based on vehicles that get through the intersections. Because of upstream and downstream congestion, fewer cars get through the intersection, which yields a better LOS.
Shaded areas indicate deficiency.
Source: Data provided by Fehr & Peers in 2005



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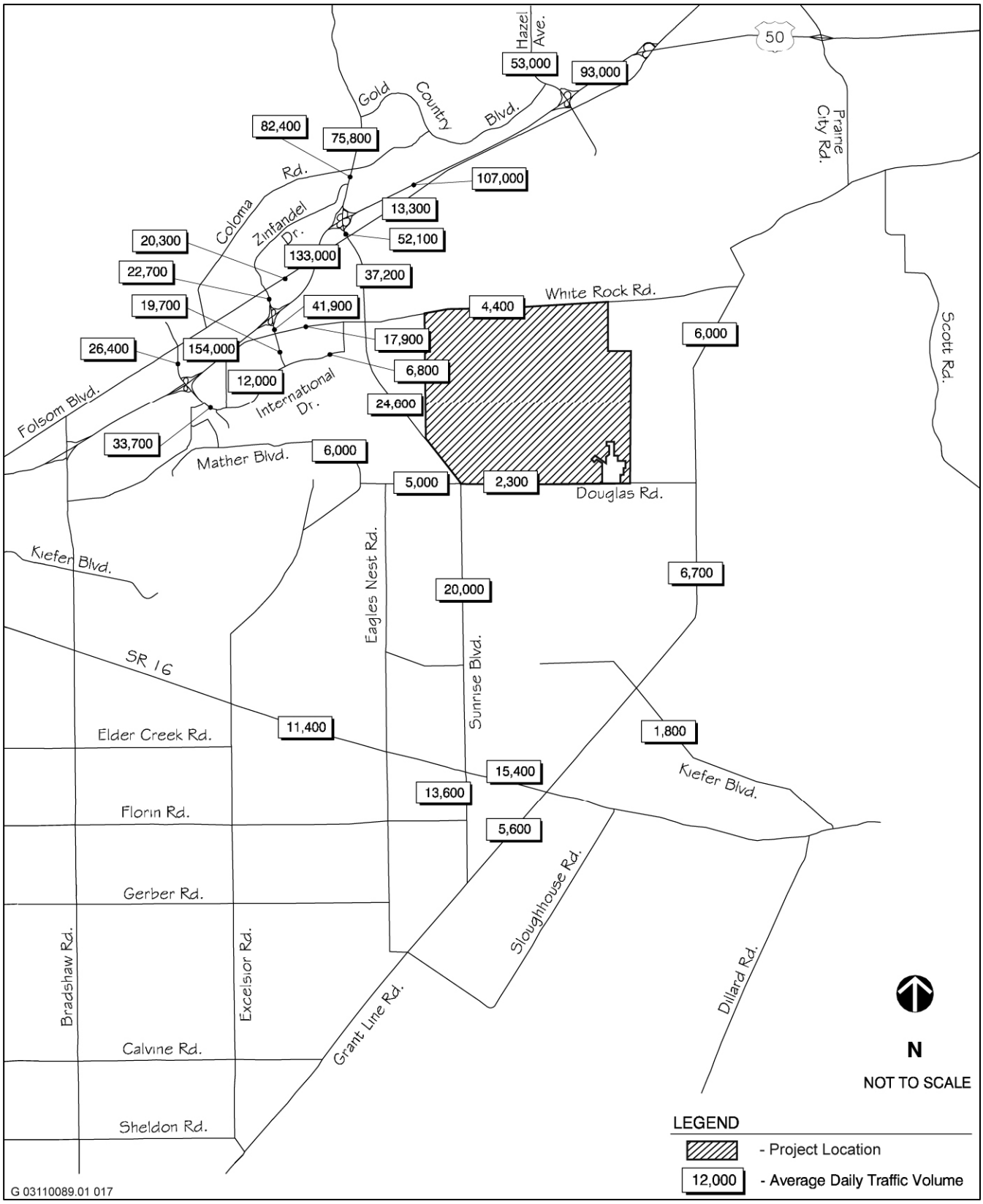
Source: Fehr & Peers 2006

Peak-Hour Traffic Volumes, Lane Configurations, and Traffic Control-Existing Conditions

EXHIBIT 3.14-2



Source: Fehr & Peers 2006

Average Daily Traffic Volumes-Existing Conditions

EXHIBIT 3.14-3

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
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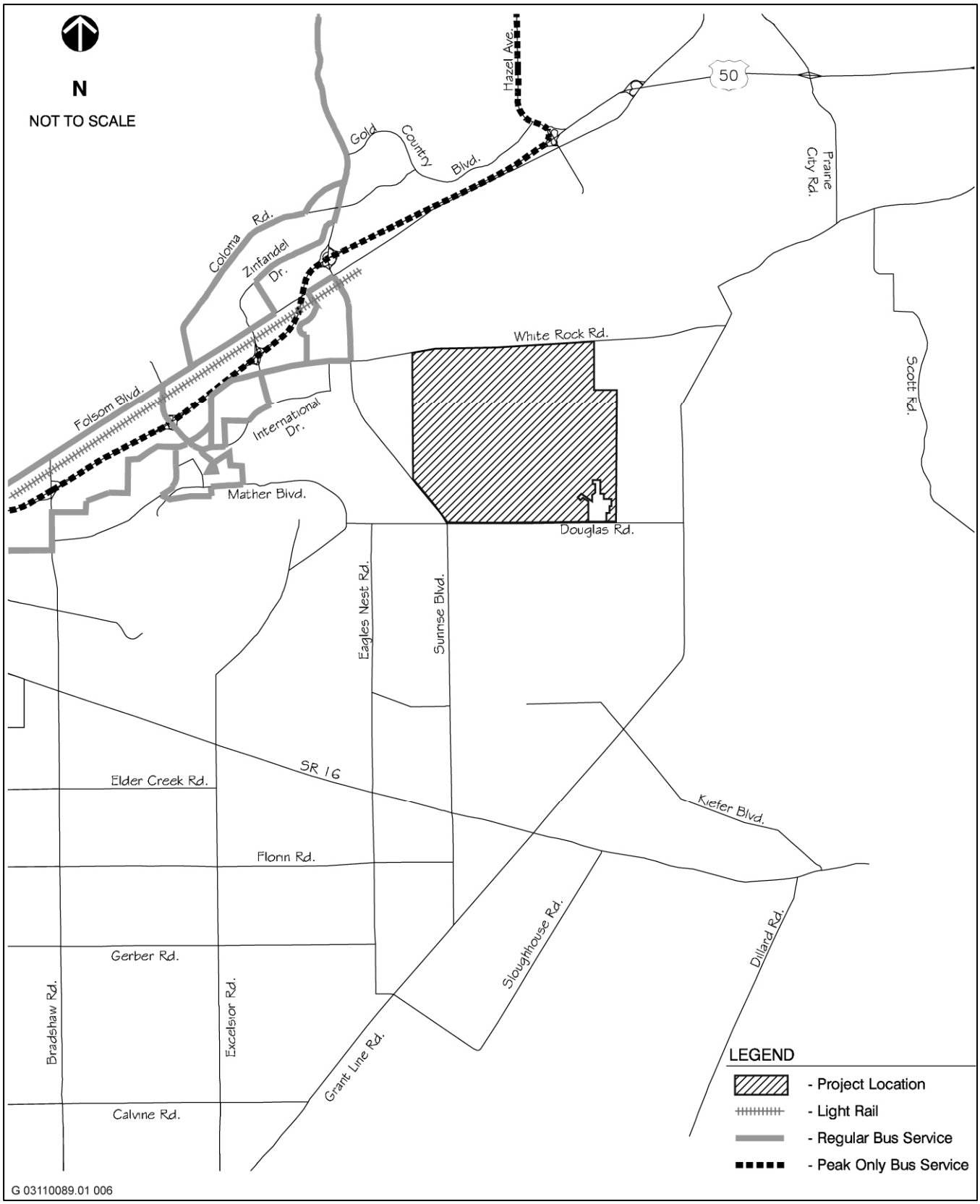


Source: Fehr & Peers 2006

Existing Transit Service

EXHIBIT 3.14-4

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
P 3T089.01 10/06

EDAW

The following intersections operate at an unacceptable LOS E or LOS F during both the a.m. and p.m. peak traffic hours:

- SR 16/Sunrise Boulevard
- SR 16/Grant Line Road
- Sunrise Boulevard/Zinfandel Drive

The following intersections operate at an unacceptable LOS E or LOS F during only the p.m. peak traffic hour:

- Grant Line Road/Sunrise Boulevard
- Mather Field Road/Folsom Boulevard
- Zinfandel Drive/U.S. 50 eastbound ramps
- White Rock Road/Grant Line Road

Roadway Segments

Table 3.14-3 presents the existing conditions analysis for roadway segments in the project study area.

The following roadway segments operate at an unacceptable LOS E or LOS F during only the p.m. peak traffic hour:

- Sunrise Boulevard between Gold Country Boulevard and Coloma Road
- Sunrise Boulevard between Coloma Road and the U.S. 50 westbound ramps
- Sunrise Boulevard between the U.S. 50 eastbound ramps and Folsom Boulevard
- Sunrise Boulevard between Douglas Road and SR 16
- Hazel Avenue between Winding Way and the U.S. 50 westbound ramps
- U.S. 50 between Hazel Avenue and Folsom Boulevard

Analyses of Freeway-Ramp Merge, Diverge, and Weave Maneuvers

The results of the analyses of freeway-ramp merge, diverge, and weave maneuvers are summarized in Table 3.14-4.

The merge, diverge, and weave maneuvers for the following on- and off-ramps are operating at LOS F, where demand exceeds capacity based on *Highway Capacity Manual* (HCM) methodology:

- Eastbound U.S. 50
  - Mather Field Road direct off-ramp—a.m. peak hour only

- Westbound U.S. 50
  - Hazel Avenue direct off-ramp—a.m. peak hour only
  - Zinfandel Drive direct on-ramp—a.m. and p.m. peak hours
  - Mather Field direct on-ramp—a.m. and p.m. peak hours

Caltrans is currently preparing documentation for the U.S. Highway 50 HOV Lane Project Plus Community Enhancement Project. This project proposes to add HOV lanes (one lane eastbound and one lane westbound) between Sunrise Boulevard and downtown Sacramento, and to develop strategies and projects to improve the street system adjacent to U.S. 50. The Caltrans District 3 project Web site is located at http://www.dot.ca.gov/dist3/projects/Sac50HOV/.

Table 3.14-3
Roadway Levels of Service—Existing Conditions

Roadway Segment	Existing Conditions			
	Lanes	Volume	V/C	LOS
1. SR 16—Excelsior Road to Eagles Nest Road	2	11,400	0.63	B
2. SR 16—Sunrise Boulevard to Grant Line Road	2	15,400	0.86	D
3. Kiefer Boulevard—Grant Line Road to north of SR 161	2	1,800	0.09	B
4. Mather Boulevard—Femoyer Street to Douglas Road	2	6,000	0.33	A
5. Douglas Road—Mather Boulevard to Sunrise Boulevard	2	5,000	0.28	A
6. Douglas Road—Sunrise Boulevard to Grant Line Road	2	2,300	0.13	A
7. International Drive—South White Rock Road to Zinfandel Drive	4	12,000	0.33	A
8. International Drive—Zinfandel Drive to Kilgore Road	4	6,800	0.19	A
9. White Rock Road—Zinfandel Drive to Sunrise Boulevard	6	17,900	0.33	A
10. White Rock Road—Sunrise Boulevard to Grant Line Road	2	4,400	0.24	A
11. Folsom Boulevard—Zinfandel Drive to Sunrise Boulevard	4	20,300	0.56	A
12. Folsom Boulevard—Sunrise Boulevard to Hazel Avenue	2	13,300	0.74	C
13. Mather Field Road—Folsom Boulevard to U.S. 50 westbound ramps	4	26,400	0.73	C
14. Mather Field Road—U.S. 50 eastbound ramps to International Drive	6	33,700	0.62	B
15. Zinfandel Drive—Folsom Boulevard to U.S. 50 westbound ramps	4	22,700	0.63	B
16. Zinfandel Drive—U.S. 50 eastbound ramps to White Rock Road	6	41,900	0.78	C
17. Zinfandel Drive—White Rock Road to International Drive	6	19,700	0.36	A
18. Sunrise Boulevard—Gold Country Boulevard to Coloma Road	6	75,800	1.40	F
19. Sunrise Boulevard—Coloma Road to U.S. 50 westbound ramps	6	82,400	1.53	F
20. Sunrise Boulevard—U.S. 50 eastbound ramps to Folsom Boulevard	6	52,100	0.96	E
21. Sunrise Boulevard—Folsom Boulevard to White Rock Road	6	37,200	0.69	B
22. Sunrise Boulevard—White Rock Road to Douglas Road	4	24,600	0.68	B
23. Sunrise Boulevard—Douglas Road to SR 16	2	200,003	1.00	E
24. Sunrise Boulevard—SR 16 to Grant Line Road	2	13,600	0.76	C
25. Hazel Avenue—Winding Way to U.S. 50 westbound ramps[2]	4	53,000	1.33	F
26. Grant Line Road—White Rock Road to Douglas Road	2	6,000	0.33	A
27. Grant Line Road—Douglas Road to SR 16	2	6,700	0.37	A
28. Grant Line Road—SR 16 to Sunrise Boulevard	2	5,600	0.31	A
29. U.S. 50—Mather Field Road to Zinfandel Drive	8	154,000	0.96	E
30. U.S. 50—Zinfandel Drive to Sunrise Boulevard	8	133,000	0.83	D
31. U.S. 50—Sunrise Boulevard to Hazel Avenue	6	107,000	0.89	D
32. U.S. 50—Hazel Avenue to Folsom Boulevard	4	93,000	1.16	F

Notes: LOS = level of service; SR = State Route; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity
[1] Roadway segment is currently not a through roadway.
[2] Roadway segment assumed to have high access control.
[3] Roadway segment operates at capacity.
Shaded areas indicate deficiency.
Source: Data provided by Fehr & Peers in 2005

Table 3.14-4
Levels of Service for Freeway-Ramp Merge, Diverge, and Weave Maneuvers—Existing Conditions

Ramp	Merge, Diverge, or Weave Maneuvers	A.M. Peak		P.M. Peak	
		Density[1]	LOS[2]	Density[1]	LOS[3]
Eastbound U.S. 50					
Mather Field Road direct off-ramp	Diverge	45	F	39	E
Mather Field Road loop on-ramp	Merge	23	C	23	C
Mather Field Road direct on-ramp	Merge	22	C	22	C
Zinfandel Drive direct off-ramp	Diverge	23	C	15	B
Zinfandel Drive loop on-ramp	Merge	20	B	25	C
Zinfandel Drive direct on-ramp	Merge	20	B	24	C
Sunrise Boulevard direct off-ramp	Diverge	22	C	31	D
Sunrise Boulevard loop/direct on-ramp	Merge	27	C	36	E
Hazel Avenue direct off-ramp	Diverge	15	B	23	C
Hazel Avenue loop/direct on-ramp Aerojet direct off-ramp	Weave	NA	D	NA	E
Westbound U.S. 50					
Hazel Avenue direct off-ramp	Diverge	43	F	37	E
Hazel Avenue loop on-ramp	Merge	37	E	30	D
Sunrise Boulevard direct off-ramp	Diverge	14	B	31	D
Zinfandel Drive direct off-ramp	Diverge	37	E	29	D
Zinfandel Drive loop on-ramp	Merge	29	D	28	C
Zinfandel Drive direct on-ramp	Merge	36	F	37	F
Mather Field Road direct off-ramp	Diverge	36	E	37	E
Mather Field Road loop on-ramp	Merge	28	D	32	D
Mather Field Road direct on-ramp	Merge	36	F	43	F

Notes: LOS = level of service; NA = not applicable; U.S. 50 = U.S. Highway 50

[1] Density in passenger cars per mile per lane for merge/diverge analysis only.

[2] LOS computed using Highway Capacity Software (HCS) 2000 software for the merge/diverge analysis consistent with HCM 2000 methodologies. Weave analysis evaluated using the Leisch Method for Weaving Analysis.

Shaded areas indicate deficiency where calculation indicates that demand exceeds capacity.

Source: Data provided by Fehr & Peers in 2005

3.14.2 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

There are no federal plans, policies, regulations, or laws related to traffic and transportation that apply to the project or alternatives under consideration.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Caltrans policies are applicable to the project and alternatives under consideration and are summarized in Caltrans' *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002). These guidelines identify circumstances under which Caltrans believes that a traffic impact study would be required, information that Caltrans believes should be included in the study, analysis scenarios, and guidance on acceptable analysis methodologies.

In addition to these policies, Caltrans prepares a Transportation Concept Report (TCR) for each of its facilities in the area. A TCR is a long-term planning document that each Caltrans district prepares for every state highway or portion thereof in its jurisdiction. This document usually represents the first step in Caltrans' long-range corridor planning process. The purpose of a TCR is to determine how a highway will be developed and managed so that it delivers the targeted LOS and quality of operations that are feasible to attain over a 20-year period. These are indicated in the "route concept." In addition to the 20-year route concept level, the TCR includes an "ultimate concept," which is the ultimate goal for the route beyond the 20-year planning horizon. Ultimate concepts must be used cautiously, however, because unforeseen changes in land use and other variables make forecasting beyond 20 years difficult.

SR 16 in the project study area has a route concept level of LOS E. The ultimate concept for SR 16 is a four-lane facility with continuous left-turn lane (Caltrans 2004a). U.S. 50 in the project study area has a route concept level of LOS F. The ultimate concept for U.S. 50 is a 10- to 12-lane freeway between Sunrise Boulevard and SR 99 and an eight-lane freeway with HOV lanes east of Sunrise Boulevard. (Caltrans 1998.) As described previously in this section, Caltrans is currently conducting a study to add HOV lanes west of Sunrise Boulevard.

The *County of Sacramento Traffic Impact Analysis Guidelines* (County Guidelines) (County of Sacramento 2004), described in detail later in this section, incorporate and are consistent with Caltrans' requirements. Therefore, the County Guidelines are used for identifying impacts associated with project-generated traffic, which were adopted by the City of Rancho Cordova upon incorporation.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND LAWS

Metropolitan Transportation Plan for 2025

The MTP 2025 (SACOG 2002) is a long-range planning document for identifying and programming roadway improvements throughout the Sacramento region. The MTP 2025 has a history of being able to fund and deliver identified Tier I projects through state and local funding.

Rancho Cordova General Plan

Goals and policies of the City General Plan relating to traffic and transportation that the City has found to be applicable to the project are provided in Appendix F.

Because the City formally adopted the County's traffic-impact study guidelines upon incorporation, plans and policies from the County Guidelines (County of Sacramento 2004) were used in this analysis, except where the Circulation Element/Plan of the City General Plan (City of Rancho Cordova 2005a, 2005b) supersedes County thresholds and requirements.

Measure A

Measure A is a half-cent sales tax that was approved by voters to implement transportation improvements in the Sacramento region. Some Measure A funding has been identified to fund specific roadway improvements in the project study area.

2010 Sacramento City/County Bikeway Master Plan

The *2010 Sacramento City/County Bikeway Master Plan* (County of Sacramento 1992) identifies existing and planned bicycle routes through and near the planning area. The only existing facility is an off-street path along the Folsom South Canal west of Sunrise Boulevard, connecting Hazel Avenue north of U.S. 50 with Grant Line Road. On-street bike lanes are planned on Sunrise Boulevard, Grant Line Road, Jackson Highway (SR 16) (just past Grant Line Road), Kiefer Boulevard west of Sunrise Boulevard, Douglas Road west of Sunrise Boulevard, and White Rock Road.

The master plan also contains design, safety, and traffic control standards for use in constructing and/or upgrading facilities.

The Circulation Element/Plan of the City General Plan also identifies bicycle facilities within and around the project site.

Transit Master Plan

Sacramento RT's 20-year master plan for transit facilities includes planned feeder bus service for Sunrise Boulevard, Mather Boulevard, and Zinfandel Drive. These bus lines are intended to support light-rail service along the Folsom Boulevard/U.S. 50 corridor, which currently extends as far east as Sunrise Boulevard. Light-rail service has recently been extended to the city of Folsom and includes a stop at Hazel Avenue.

The City, as part of the Circulation Element/Plan of the City General Plan, has developed a transit system map that identifies corridors for potential transit routes, bus rapid transit (BRT), enhanced transit corridors, and future light-rail stations.

Development Financing Plans

The County has implemented several financing plans for implementing roadway improvements with specific plan developments in the area. The following financing plans are in place and have identified funding for improvements in the project study area:

- **Villages of Zinfandel Public Facilities Financing Plan**—financing plan for development within the Villages of Zinfandel Specific Plan area, originally within County boundaries, now within City boundaries
- **SunRidge Public Facilities Financing Plan**—financing plan for development within the SunRidge Specific Plan area, originally within County boundaries, now within City boundaries
- **Mather Field Public Facilities Financing Plan**—financing plan for development within the Mather Field Specific Plan area in Sacramento County
- **North Vineyard Station Public Facilities Financing Plan**—financing plan for development within the North Vineyard Station Specific Plan area in Sacramento County
- **Vineyard Springs Comprehensive Plan Public Facilities Financing Plan**—financing plan for development within the Vineyard Springs Comprehensive Plan area in Sacramento County

City of Rancho Cordova Capital Improvement Program

The City has been operating under a 5-year CIP (2005–2010) that includes several roadway facilities in the project study area, including improvements to Douglas Road, Jaeger Road, Kiefer Boulevard, Sunrise Boulevard, and SR 16. Funding sources associated with the current CIP include development fees, financing districts, Measure A sales taxes, and state and federal funding sources. The CIP has been expanded and now includes updated development fees and additional roadway improvements identified in the Circulation Element/Plan of the

City General Plan. The City's CIP consists of identification of planned roadway improvements within Rancho Cordova, cost estimates of identified roadway improvements, and a nexus study to identify fair-share contributions of new development to identified roadway improvements. The City's CIP is assumed to be fully funded and incorporates the Villages of Zinfandel and SunRidge CIP financing documents. If the CIP is not fully funded, the project applicant(s) would be required to pay their fair-share contribution to the CIP.

SunRidge Specific Plan

The SunRidge Specific Plan was developed for the area just south of the project site (south of Douglas Road) and is generally bounded by Sunrise Boulevard, Douglas Road, Grant Line Road, and Kiefer Boulevard. Conditions of approval were applied to the SunRidge Specific Plan (County of Sacramento 2002) identifying development thresholds that could not occur unless specific roadway improvements in the area were under construction or completed. Of note, a condition requiring construction of the Rancho Cordova Parkway interchange (or other roadway improvements) was applied to a development threshold of 6,500 units to ease congestion levels on Sunrise Boulevard.

Because the thresholds identified in the SunRidge Specific Plan were conditions of approval, they are not directly applicable to development thresholds for the Rio del Oro Specific Plan development project. However, development of the Rio del Oro Specific Plan would increase traffic burdens on Sunrise Boulevard similar to the SunRidge Specific Plan.

The City has completed an improvement phasing study that identified the timing for potential roadway improvements (consistent with the City's CIP) to prioritize improvements to accommodate development south of U.S. 50 and east of Sunrise Boulevard. The phasing study correlated development thresholds for all development south of U.S. 50 and east of Sunrise Boulevard to roadway improvement packages consistent with the City's CIP roadway system.

Mobility Strategies for County Corridors (Sacramento County Mobility Study)

The County Mobility Study (County of Sacramento and Fehr & Peers 2004) was an exercise to develop candidate strategies for 11 of the county's most congested corridors. The purposes of the study were to enhance mobility, as defined by reduced travel times and improved travel-time reliability; increase the people-moving capacity; and improve safety for all users of the transportation system. Within Rancho Cordova, the mobility study identified optional strategies to improve mobility on Sunrise Boulevard, including pedestrian and bicycle enhancements, BRT, transitway development compatibility, lane additions, and intelligent transportation systems.

The mobility study is a planning-level opportunities study. The City General Plan incorporates strategies identified in the mobility study, including certain components of the study, such as BRT. Because the mobility study is a planning-level study, this DEIR/DEIS qualitatively identifies potential incompatibilities with the study options.

3.14.3 Environmental Consequences and Mitigation Measures

Thresholds of Significance

Roadway Facilities

The operations of roadway facilities are described in terms of LOS. LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, freedom to maneuver, volume, and capacity. Six levels are defined, from LOS A, as the best operating conditions, to LOS F, or the worst operating conditions, as shown in Table 3.14-5. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

Table 3.14-5
Level-of-Service Definitions for Intersections

Level of Service	Type of Flow	Delay	Maneuverability
A	Free flow	Very slight or no delay. If signalized, conditions are such that no approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.	Turning movements are easily made, and nearly all drivers find freedom of operation.
B	Stable flow	Slight delay. If signalized, an occasional approach phase is fully utilized.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted in groups of vehicles.
C	Stable flow	Acceptable delay. If signalized, a few drivers arriving at the end of a phase must wait through one signal cycle.	Backups may develop behind turning vehicles. Most drivers feel somewhat restricted.
D	Approaching unstable flow	Tolerable delay. Delays may be substantial during short periods, but excessive backups do not occur.	Maneuverability is severely limited during short periods because of temporary backups.
E	Unstable flow	Intolerable delay. Delay may be great, up to several signal cycles.	There are typically long queues of vehicles waiting upstream of the intersection.
F	Forced flow	Excessive delay.	Jammed conditions. Backups from other locations restrict or prevent movement. Volumes may vary widely, depending primarily on downstream conditions.

Source: Transportation Research Board 2000

Because the project and development alternatives under consideration would cause traffic impacts on roadways that are under state, County, and City jurisdictions, this analysis was conducted using a combination of policies and guidelines. The City identifies LOS D as its minimum standard for intersection operations. The County identifies LOS E as the minimum acceptable standard for intersection operations in the project vicinity. For state-controlled facilities, thresholds presented in the State's Route Concept Report were applied. (The concept service level for SR 16 is LOS E. The concept service level for U.S. 50 is LOS F. For this study, LOS E is applied to segments of U.S. 50 as a conservative approach for identifying impacts.).

Roadway Segments

Based on the County Guidelines and the LOS policy in the Circulation Element/Plan of the City General Plan, a roadway-segment impact is considered significant if the addition of project-generated traffic under the proposed project or alternatives under consideration would cause:

- a roadway segment in Rancho Cordova or within the City's Planning Area operating at an acceptable LOS D or better to degrade to an unacceptable LOS E or LOS F;
- a roadway segment in Sacramento County (outside the City's Planning Area) operating at an acceptable LOS E or better to degrade to an unacceptable LOS F;
- an increase in the volume-to-capacity (V/C) ratio of 0.05 or more on a roadway segment in Rancho Cordova or Sacramento County operating an unacceptable level (LOS E or LOS F in the Rancho Cordova and the City's Planning Area, or LOS F in Sacramento County [outside the City's Planning Area]); or
- a significant increase in reliance on single-occupant vehicles to facilitate mobility within Rancho Cordova.

Note that the V/C ratio threshold is consistent with thresholds used in various jurisdictions within California, including but not limited to Sacramento County.

Signalized Intersections

Based on the County Guidelines and the Circulation Element/Plan of the City General Plan, a signalized-intersection impact at a study intersection is considered significant if the addition of project-generated traffic under the proposed project or alternatives under consideration would cause:

- a signalized intersection operating at an acceptable LOS D or better in Rancho Cordova or the City's Planning Area to degrade to an unacceptable LOS E or LOS F;
- a signalized intersection operating at an acceptable LOS E or better in Sacramento County (outside the City's Planning Area) to degrade to an unacceptable LOS F; or
- an increase in the V/C ratio of 0.05 or more at a signalized intersection in Rancho Cordova or Sacramento County operating at an unacceptable level (LOS E or LOS F in Rancho Cordova and the City's Planning Area, or LOS F in Sacramento County [outside the City's Planning Area]).

Note that the V/C ratio threshold is consistent with thresholds used in various jurisdictions within California, including but not limited to Sacramento County.

Unsignalized Intersections

Based on the County Guidelines and the Circulation Element/Plan of the City General Plan, an unsignalized-intersection impact at a study intersection is considered significant if the addition of project-generated traffic under the proposed project or alternatives under consideration would cause:

- an unsignalized intersection in Rancho Cordova or the City's Planning Area operating at an acceptable LOS D or better to degrade to an unacceptable LOS E or LOS F;
- an unsignalized intersection in Sacramento County (outside the City's Planning Area) operating at an acceptable LOS E or better to degrade to an unacceptable LOS F; or
- an increase of 5 seconds or more of control delay at an unsignalized intersection operating at an unacceptable level (LOS E or LOS F in Rancho Cordova and the City's Planning Area, or LOS F in Sacramento County [outside the City's Planning Area]).

Note that the control-delay threshold is consistent with thresholds used in various jurisdictions within California, including but not limited to Sacramento County.

Freeway Ramp Merge, Diverge, and Weave

Based on the County Guidelines and the Circulation Element/Plan of the City General Plan, a freeway-ramp merge/diverge/weave impact is considered significant if the addition of project-generated traffic under the proposed project or alternatives under consideration would:

- cause a facility operating at an acceptable level (based on the Route Concept Report) to deteriorate to an unacceptable level, or
- add 10 trips or more to a freeway ramp that is operating at an unacceptable level. (Volume projections for future conditions are rounded to the nearest 10. Therefore, using this threshold is consistent with the rounding of future forecasts. This threshold is consistent with other studies conducted in the Sacramento region.)

Freeway Segments

Based on the County Guidelines and the Circulation Element/Plan of the City General Plan, a freeway-segment impact is considered significant if the addition of project-generated traffic under the proposed project or alternatives under consideration would:

- cause a facility operating at an acceptable level (based on the Route Concept Report) to deteriorate to an unacceptable level, or
- add 10 trips or more to a freeway segment that is operating at an unacceptable level. (Volume projections for future conditions are rounded to the nearest 10; see "Freeway Ramp Merge, Diverge, and Weave" above.)

Bicycle, Pedestrian, and Transit Facilities

Based on the County Guidelines and the Circulation Element/Plan of the City General Plan, a bicycle, pedestrian, or transit-facility impact is considered significant if the proposed project or alternatives under consideration would do any of the following:

- eliminate or adversely affect an existing bikeway, pedestrian facility, or transit facility in a way that would discourage its use;
- interfere with the implementation of a planned bikeway as shown in the County's Bicycle Master Plan or the Bikeway and Trails Map in the City's Circulation/Element Plan, be in conflict with the Pedestrian Master Plan, or be in conflict with any future transit facility;
- result in unsafe conditions for bicyclists or pedestrians, including unsafe bicycle/pedestrian, bicycle/motor vehicle, pedestrian/motor vehicle, transit/bicycle, transit/pedestrian, or transit/motor vehicle conflict; or
- result in demands to transit facilities greater than there is adequate capacity to accommodate.

Because the proposed specific plan is consistent with the City General Plan, the project is expected to have less-than-significant impacts on pedestrian, bicycle, and transit facilities.

ANALYSIS METHODOLOGY

The study roadway segments, intersections, and freeway facilities identified for inclusion in this analysis were developed in consultation with County staff members (the County was providing support to the City when this project was initiated), City staff members, and comments received on the Notice of Preparation (NOP) (see Appendix B, Scoping Report for the Rio del Oro Development Project for copies of comments received on the NOP.

Roadway Facilities

Roadway Segments

Roadway segments were analyzed by comparing the ADT volume to daily volume thresholds. Table 3.14-6 displays the daily volume thresholds for various facility types. These thresholds were used as guidelines to project the need for new or upgraded facilities. In general, analysis of intersection operations provides a more realistic assessment of traffic conditions on a road than analysis of roadway segments.

Table 3.14-6
Daily Volume Thresholds for Roadway Segments[1]

Facility Type	Number of Lanes	Daily Volume Threshold (Level of Service)				
		LOS A	LOS B	LOS C	LOS D	LOS E
Residential	2	600	1,200	2,000	3,000	4,500
Residential local road with frontage	2	1,600	3,200	4,800	6,400	8,000
Residential local road without frontage	2	6,000	7,000	8,000	9,000	10,000
Secondary road, low access control	2	9,000	10,000	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Secondary road, moderate access control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Secondary road, high access control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	42,000	48,000	54,000	60,000
Rural, two-lane highway	2	2,400	4,800	7,900	13,500	22,900
Rural, two-lane road, paved shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural, two-lane road, no shoulders	2	1,800	3,600	5,900	10,100	17,000
Expressway[2]	6	24,300	39,720	56,700	72,900	81,000
Freeway[3]	2	14,000	21,600	30,800	37,200	40,000
	4	28,000	43,200	61,600	74,400	80,000
	6	42,000	64,800	92,400	11,600	120,000
	8	56,000	86,400	123,200	148,800	160,000

Note: LOS = level of service

[1] County of Sacramento 2004

[2] Based on capacities in the Rancho Cordova's General Plan EIR.

[3] County of Sacramento 1997 (the 2004 Traffic Impact Analysis Guidelines do not provide capacities for freeway segments)

Source: Data provided by Fehr & Peers in 2005

The County Guidelines and the Caltrans Route Concept Report for SR 16 identify LOS E as the minimum acceptable operating level for roadway segments within the Urban Services Boundary. The Circulation Element/Plan of the City General Plan identifies LOS D as the minimum acceptable operating level for roadway segments within Rancho Cordova.

The Circulation Element/Plan of the City General Plan does recognize that significant improvements to Sunrise Boulevard (and the other river crossings in the area) and Folsom Boulevard—improvements that are not consistent with the City's Circulation Element/Plan—would be required to provide LOS D operations. The City's Circulation Element/Plan has policies relating to bicycle and pedestrian connectivity and the desire to minimize intersection and roadway cross sections. For example, the policies call for a six-lane maximum roadway cross section within Rancho Cordova and a four-lane cross section on Folsom Boulevard, where the City's mixed-use and transit-oriented design areas are located and where the City desires enhanced LRT, bicycle, and pedestrian facilities. Therefore, the Circulation Element/Plan states that it is not the City's desire to implement roadway widening on these roadways (to more than six lanes on most roadways and to more than four lanes on Folsom Boulevard), and that a lower LOS should apply to these facilities. However, an impact threshold of LOS D was used for these facilities for the purposes of this analysis (a conservative assumption for CEQA/NEPA impact assessments).

Signalized Intersections

Signalized intersections were analyzed using the methodology contained in *Interim Materials on Highway Capacity* (Circular 212) (Transportation Research Board 1980), consistent with the County Guidelines. (Note that use of this methodology ties project impacts to limited lane capacities at the study locations and is consistent with current study requirements in Sacramento County and other jurisdictions within the state.) This methodology determines the intersection LOS by comparing the critical V/C ratio at the intersection to the thresholds shown in Table 3.14-7. Because the County Guidelines specify higher capacities (based on field measurements) than those originally published in Circular 212, the capacities at signalized intersections were increased as follows:

- Four or more critical-phase operations: from 1,375 to 1,500 vehicles per lane per hour
- Three critical-phase operations: from 1,425 to 1,550 vehicles per lane per hour
- Two critical-phase operations: from 1,500 to 1,650 vehicles per lane per hour

Table 3.14-7
Definitions of Intersection Levels of Service

Level of Service	Description	Unsignalized Intersection— Average Control Delay (sec/veh)	Signalized Intersection— Volume-to-Capacity Ratio
A	Represents free flow. Individual users are virtually unaffected by others in the traffic stream.	≤ 10.0	≤ 0.60
B	Stable flow, but the presence of other users in the traffic stream begins to be noticeable.	10.1—15.0	0.61—0.70
C	Stable flow, but the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.	15.1—25.0	0.71—0.80
D	Represents high-density, but stable flow.	25.1—35.0	0.81—0.90
E	Represents operating conditions at or near the capacity level.	35.1—50.0	0.91—1.00
F	Represents forced or breakdown flow.	> 50.0	> 1.00

Note: sec/veh = seconds per vehicle
Sources: Transportation Research Board 1980, 2000

LOS E is considered the minimum acceptable operating level for signalized study intersections located within Sacramento County. Caltrans' Route Concept Report for SR 16 (Caltrans 2004a) also states that LOS E should be maintained on SR 16 in this area. The City's Circulation Element/Plan (City of Rancho Cordova 2005a) states that LOS D should be maintained within the city limits.

As described previously, the City's Circulation Element/Plan does recognize that significant improvements would be required at intersections along Sunrise Boulevard (and the other river crossings in the area) and Folsom Boulevard to provide LOS D operations, and that such improvements would be inconsistent with other policies within the Circulation Element/Plan. Therefore, the Circulation Element/Plan states that it is not the City's desire to implement these significant improvements, and that a lower LOS should apply to these facilities. However, an impact threshold of LOS D was used for these intersections for the purposes of this analysis (a conservative assumption for CEQA/NEPA impact assessments).

Unsignalized (Stop-Controlled) Intersections

For unsignalized (four-way stop-controlled and side-street stop-controlled) intersections, the LOS analysis was conducted using the methodology contained in Chapter 17 of the *Highway Capacity Manual* (Transportation

Research Board 2000). The LOS rating is based on the average control delay expressed in seconds per vehicle. At two-way or side-street stop-controlled intersections, LOS is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. At all-way stop-controlled intersections, LOS is based on the average delay experienced on all approaches. Table 3.14-7 also summarizes the relationship between delay and LOS for unsignalized intersections.

The minimum acceptable operating levels for unsignalized intersections are LOS E for intersections within unincorporated Sacramento County and LOS D for intersections within the city limits of Rancho Cordova.

To determine whether signals should be installed at any one location, signal warrants are typically reviewed. This consists of reviewing traffic levels, proximity of the intersection to other signals and to schools, accident frequency, and other factors against a set of warrants identified in the *Traffic Manual* (Caltrans 1995) and the *Manual on Uniform Traffic Control Devices* (FHWA 2003) to identify whether installing a traffic signal would be appropriate.

Warrants for traffic signal installation at unsignalized intersections were evaluated based on the peak-hour volume warrant contained in the *Traffic Manual.* The peak-hour warrant is a subset of the standard traffic-signal warrants recommended in the *Manual on Uniform Traffic Control Devices* and associated Caltrans guidelines. The peak-hour signal warrant analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecasted, traffic data, and on a thorough study of traffic and roadway conditions conducted by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, because the installation of signals can lead to certain types of collisions (such as rear-end collisions). Although signals provide increased capacity at intersections and may be needed (from a capacity perspective) to serve predicted volume demands at the intersection, the potential safety implications associated with signal installation should be reviewed by the responsible state or local agency (depending on whether the intersection is controlled by the state, the County, or the City). The responsible agency should undertake regular monitoring of actual traffic conditions and accident data, and a timely reevaluation of the full set of warrants to prioritize and program intersections that may be identified for signalization in this study.

Freeway-Ramp Merge, Diverge, and Weave

A merge/diverge analysis was conducted at area interchanges using the 2000 Highway Capacity Software package. The software is consistent with the methodologies contained in Chapters 24 and 25 of the *Highway Capacity Manual* (Transportation Research Board 2000). This methodology was chosen because it is the analysis methodology typically used by Caltrans for analysis of freeway-ramp merge, diverge, and weave maneuvers and because it correlates the LOS to the expected density of vehicles in passenger cars per mile per lane. Table 3.14-8 summarizes the relationship between density and LOS for freeway ramps.

Table 3.14-8
Definitions of Freeway-Ramp Merge/Diverge Levels of Service

Level of Service	Density (pc/mi/ln)[1]
A	< 10.0
B	> 10.0 and < 20.0
C	> 20.0 and < 28.0
D	> 28.0 and < 35.0
E	> 35.0
F	Demand exceeds capacity

Note: pc/mi/ln = passenger cars per mile per lane
Source: Transportation Research Board 2000

The weaving analysis for the freeway segment between Hazel Avenue and Aerojet Road was conducted using the nomograph presented in Figure 507.7A in the *Highway Design Manual* (Caltrans 2004b). This methodology is referred to as the Leisch Method for Weaving Analysis and was chosen because it is the methodology typically used by Caltrans to evaluate the effectiveness of weaving segments.

Consistent with the impact guidelines, acceptable freeway-ramp operating levels are those defined by Caltrans in the Route Concept Report. Caltrans has identified LOS E as the minimum acceptable threshold for U.S. 50 freeway ramps from east of SR 99 to the El Dorado County line.

Bicycle, Pedestrian, and Transit Facilities

Bicycle facilities include Class I (off-street facilities), Class II (on-street bicycle lanes identified with signage and markings), and Class III (on-street bicycle routes identified by signage). Pedestrian facilities are composed of paths, sidewalks, and pedestrian crossings. Transit facilities include shuttle services, bus service, BRT, and light-rail facilities.

Analysis Scenarios

The following scenarios were analyzed to determine the impacts of the proposed project and alternatives under consideration:

- **Baseline conditions plus first phase of project (Baseline Plus Phase 1).** This scenario places traffic generated by buildout of Phase 1 of the Rio del Oro Specific Plan in the existing roadway network, along with traffic expected from projects that City staff members have identified as having already received tentative map approval, as well as traffic from development of up to 6,500 units in the SunRidge Specific Plan area.

- **Baseline conditions plus full project buildout (Baseline Plus Full Buildout),** This scenario places traffic generated by full buildout of the entire Rio del Oro Specific Plan in the existing roadway network, along with traffic expected from projects that City staff members have identified as having already received tentative map approval, as well as traffic from development of up to 6,500 units in the SunRidge Specific Plan area.

- **Cumulative (2030) conditions plus project buildout (2030 Plus Buildout).** This scenario incorporates roadways and traffic generation associated with full buildout of the entire Rio del Oro Specific Plan into the traffic volumes anticipated from regional development present in 2030.

As described earlier in this chapter, an additional analysis, corresponding to a year 2014 planning horizon, was conducted for development Phase 1 of the project and full buildout of the project (Appendix I). This scenario was not evaluated as part of the CEQA/NEPA process, but was evaluated to aid the City in identifying the phasing of transportation improvements. Year 2014 corresponds to development expected by 2014 with roadway improvements expected by 2014 (including Rancho Cordova Parkway and the associated U.S. 50 interchange).

Travel Demand Forecasts

Impacts on the roadway system for baseline, year 2014, and cumulative 2030 conditions were determined by forecasting the increase in daily and peak-hour traffic volumes that would occur with implementation of the project. The 2001 modified version of the SACMET regional travel demand forecasting (TDF) model was used to develop daily and a.m. and p.m. peak-hour traffic volume forecasts for the study roadways and intersections and is consistent with the SACOG MTP 2025. A TDF model is a tool that assigns trips generated by the various land uses to the surrounding roadway network based on the locations of attractions and productions. To accomplish this task, the TDF incorporates several types of data: land use information (consistent with area general plan documents, reasonably foreseeable development, and economic land use forecasts); trip generation characteristics; mode choice; roadway networks; and census information. Using the TDF model for the Rio del Oro project allowed reasonably foreseeable planned development projects and fully funded roadway improvement projects to

be incorporated into traffic forecasting efforts. This approach uses the best available technical tools in the region to develop future forecasts for the project study area.

For this study, the model was used to generate daily and peak-hour traffic volume forecasts for the following scenarios:

- Baseline Conditions
- Baseline Plus Phase 1
- Baseline Plus Full Buildout
- Year 2014 Plus Phase 1
- Year 2014 Plus Full Buildout
- Cumulative 2030 No Project Conditions
- Cumulative 2030 Plus Buildout

Before the TDF model could be used for this study, the land use and roadway network components of the model were modified to accurately reflect each scenario.

Land Use Modifications

When land use information is input into TDF models, areas are split into traffic analysis zones (TAZs). To more accurately reflect loading of land use onto the roadway system for the project study area, additional TAZs were added to the model and the project's land uses were disaggregated into these zones. Additionally, TAZs for other developments in Rancho Cordova, including but not limited to the SunRidge Specific Plan, SunCreek Specific Plan, Villages of Zinfandel, Easton Development, and Westborough Development areas, were disaggregated to accurately reflect the loading of vehicles from these zones to the surrounding roadway network.

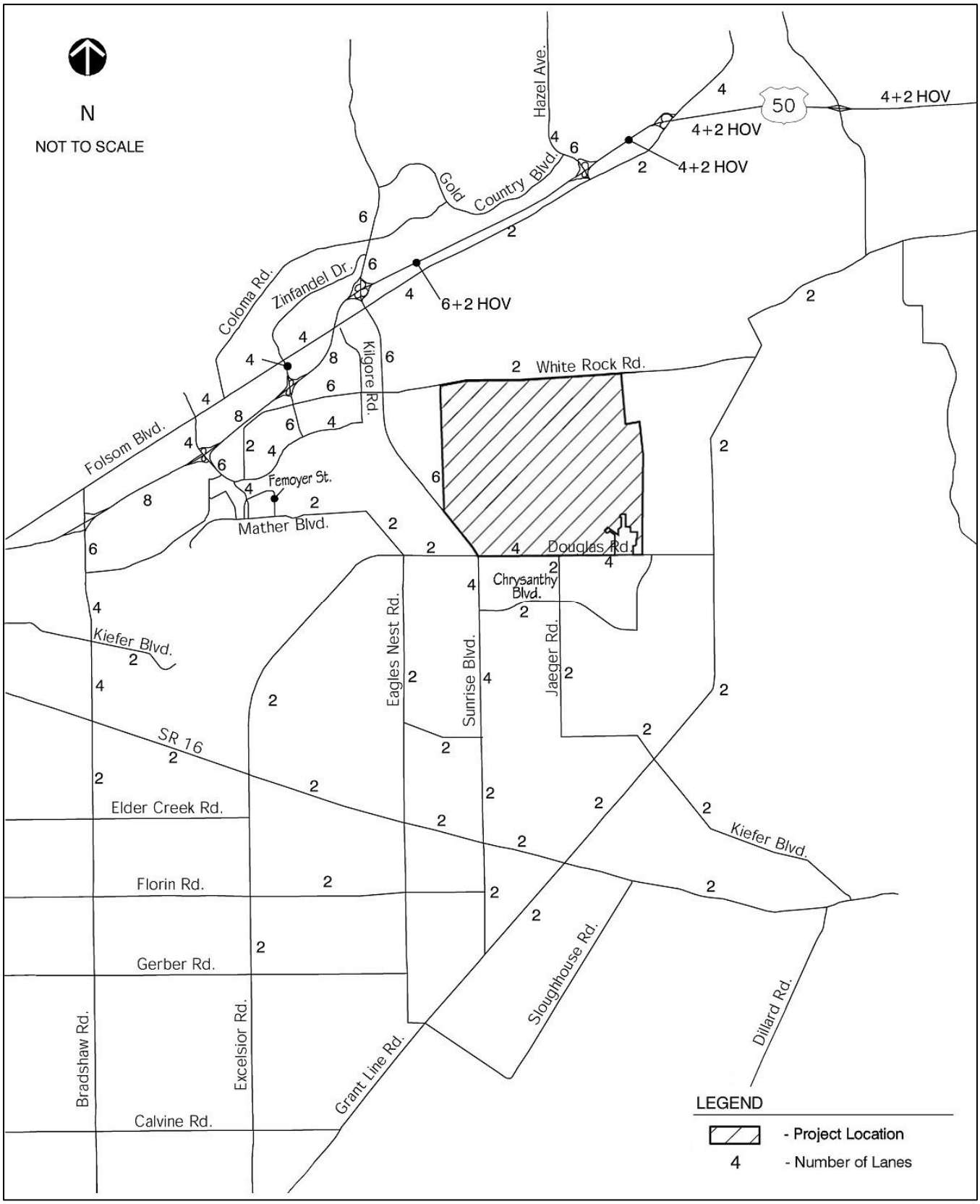
Baseline Conditions and Year 2014 land use projections were developed using information for approved projects in the area provided by City staff members and information described in *Methodology for the 2030 Cumulative Traffic Assumptions* (City of Rancho Cordova 2004). (Note: The City has refined its land use assumptions through its General Plan process since October 2004, when this methodology was published. However, the October 2004 methodology was the best information available at the time for the Year 2014 analysis.) The Year 2030 land use projections for Rancho Cordova are based on the most current information provided by City staff in August 2006 and were provided at the TAZ level for land uses in Rancho Cordova. These projections are consistent with land uses adopted for the City General Plan. Year 2014 and Year 2030 land use projections outside the City's planning area (as defined in the City General Plan) were obtained from interpolation of the SACMET land use forecasts.

Roadway Network Modifications

Changes to the roadway network consisted of adding new roads in the project study area and creating new connections to the existing and planned roadway systems under Baseline (existing plus approved projects), Year 2014 (Phase 1), and Cumulative (Year 2030) conditions. Baseline roadway improvements are based on improvements that are already under construction or are a direct result of the approved projects (these improvements were identified by City staff). Regional roadways assumed for Year 2014 and Cumulative Conditions are consistent with improvements identified in the MTP 2025 (Tier I), depending on the assumed year of completion. Roadway improvements identified in the City's CIP (to be completed before year 2030) were incorporated into the Cumulative Conditions analysis for facilities within the City's current city limit boundary. This assumes that the City's CIP will be fully funded by Year 2030.

Exhibits 3.14-5a and 3.14-5b show the assumed roadway networks for Baseline and Cumulative (2030) Conditions. Exhibit 3.14-6 shows the roadway network identified in the City General Plan and the City's CIP.

Regional and local roadways assumed for Cumulative Conditions are consistent with improvements identified in the previous edition of the MTP 2025 that were identified as fundable (summary presented in Exhibit 3.14-5b).



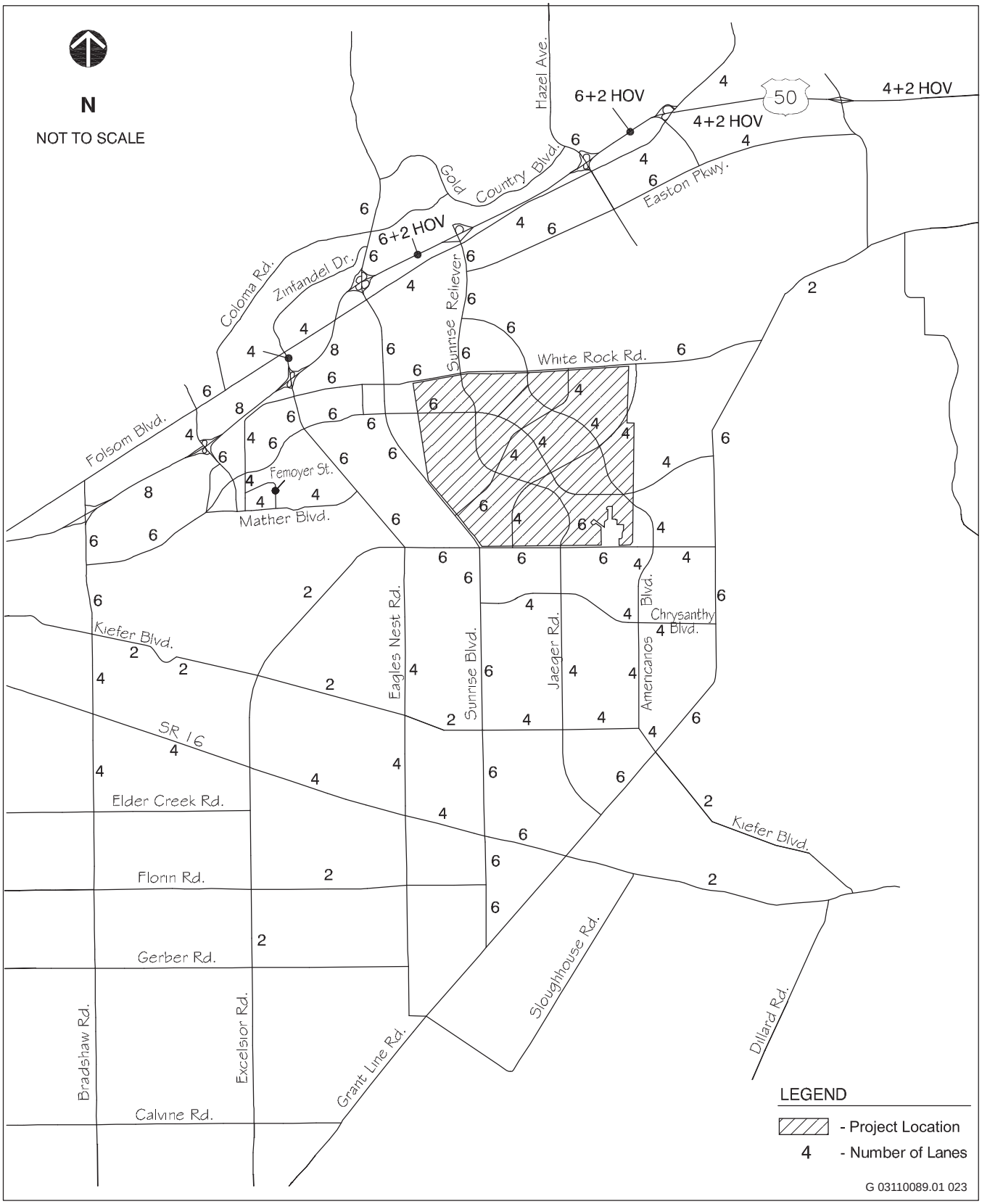
Source: Fehr & Peers 2005

Number of Lanes – Baseline Conditions

EXHIBIT 3.14-5a

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
P 03110089.01 09/05

EDAW



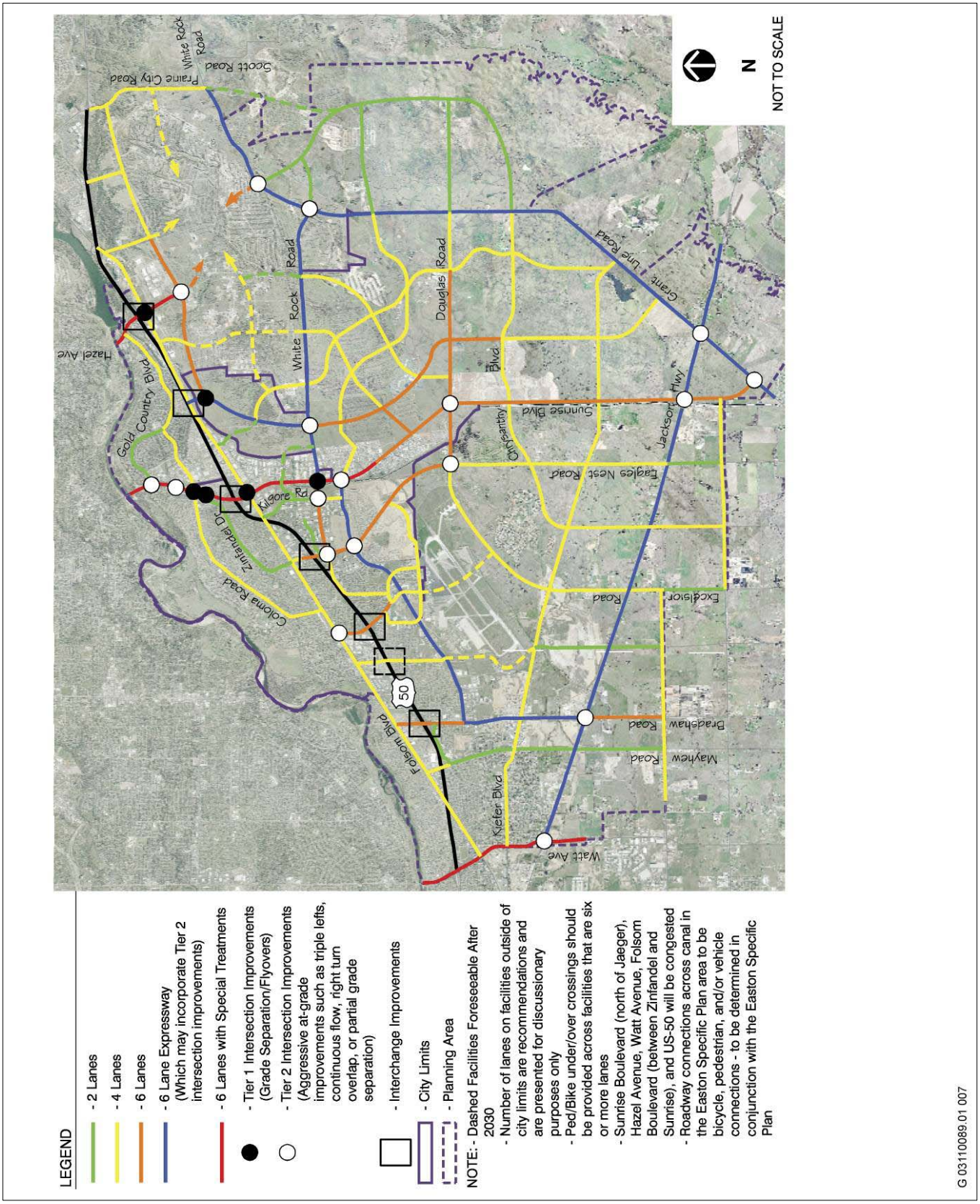
Source: Fehr & Peers 2006

Number of Lanes – Cumulative (2030) Conditions

EXHIBIT 3.14-5b

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
G 0311089.01 11/06

EDAW



Source: Fehr & Peers 2006

City of Rancho Cordova Circulation Element Plan Roadway Network

EXHIBIT 3.14-6

However, it is noted that in July 2005, after the environmental review of this project had begun (in 2004), SACOG adopted a new MTP 2025. Although the region has made significant progress in reducing ozone, a problem has arisen with regard to another requirement set forth in the federal Clean Air Act. The region's transportation plan must conform and thus show that it does not harm the region's chances of attaining the ozone standard. The SIP is tied to a "motor vehicle emissions budget;" transportation planners must ensure that emissions anticipated from plans and improvement programs remain within this budget. A conformity lapse began on October 4, 2004, resulting in an expedited process to prepare a plan. The *Sacramento Regional Nonattainment Area 8-Hour Ozone Rate-of-Progress Plan Final Report* was released in February 2006. Because of the region's lapse in air quality conformity (associated with attainment efforts for federal Clean Air Act standards for ozone), the new MTP 2025 no longer contains regional transportation projects. Based on consultation with SACOG and the Sacramento Metropolitan Air Quality Management District, this issue will be resolved after the adoption of a new MTP 2025 containing the regional transportation projects previously identified in the MTP 2025. Given these conditions, the regional and local improvements identified in the 2004 edition of the MTP 2025 are considered appropriate.

Vehicle-Trip Generation Estimates

After the changes described above were completed, the TDF model was run for each analysis scenario. Table 3.14-9 summarizes the final a.m. peak-hour, p.m. peak-hour, and daily vehicle-trip estimates for buildout of development Phase 1 and the entire proposed Rio del Oro Specific Plan development.

Table 3.14-9
Rio del Oro Vehicle-Trip Generation Summary

Development		Total Vehicle Trips[1]		
		A.M. Peak Hour	P.M. Peak Hour	Daily
Phase 1	Total trips[2]	9,330	10,210	110,690
	External trips[3]	7,620	8,210	88,570
Specific Plan buildout	Total trips[2]	19,650	20,570	229,200
	External trips[3]	14,750	15,190	168,470

Notes:

1 Trip summary based on 2001 version of the SACMET travel demand forecasting (TDF) model.

2 Represents total vehicle trips assigned to the traffic model roadway network and not trips internal to a traffic analysis zone (TAZ). Includes trips from one TAZ to another TAZ within the Rio del Oro Specific Plan area.

3 Represents vehicle trips external to the specific plan area (trips outside of the Rio del Oro project site). Does not include trips from one TAZ to another TAZ within the Rio del Oro Specific Plan area.

Source: Data provided by Fehr & Peers in 2005

After calculating the final vehicle-trip estimates, the SACMET TDF model produced traffic-volume forecasts for roadway segments and intersection turning movements for daily and a.m. and p.m. peak-hour conditions. The raw TDF model volumes for No Project conditions were adjusted by adding incremental growth projected by the TDF model to existing count data. A select zone analysis of the TDF model was used to aid in the development of project trip assignments. A select zone analysis is a model run where trip assignments for the selected zones that constitute the project are presented in the surrounding roadway system.

Exhibits showing intersection and roadway-segment volumes for all analysis scenarios are presented throughout this section.

IMPACT ANALYSIS

Program level and project level (Phase 1) impacts and mitigation measures are presented together in the section below. Effects that would occur under each alternative development scenario are identified as follows: PP (Proposed Project), HD (High Density), IM (Impact Minimization), NF (No Federal Action), and NP (No

Project). Note that all impacts of the High Density and Impact Minimization Alternatives would be similar to those of the Proposed Project Alternative, while those of the No Federal Action Alternative would be more severe than under the Proposed Project Alternative because this alternative would result in increased impacts on transportation infrastructure outside the Rio del Oro Specific Plan area. The No Project Alternative would be less severe than those of the Proposed Project Alternative because substantially less traffic-generating development would occur.

During the course of this study, the realignment of International Drive was identified for inclusion in this EIR/EIS as an option through the City's efforts on its General Plan and the 50 Corridor Mobility Partnership work. This realignment, as well as the No Federal Action Alternative, are qualitatively described below.

International Drive—The option of realigning International Drive and the ways in which project impacts would differ with implementation of this option are described further under "Program Level, Project Level (Phase 1), and Cumulative Impacts and Mitigation Measures with Realignment of International Drive" below. Realignment of International Drive is generally consistent with circulation considered as part of the alternative development scenarios (project alternatives) listed above; therefore, it is not considered as a separate project alternative in this analysis.

No Federal Action Alternative—This alternative reflects the Proposed Project Alternative as it would be if no Section 404 of the Clean Water Act permits were issued for development of the project. Land use totals under the No Federal Action Alternative are consistent with those under the Proposed Project Alternative (with higher densities of land use), but roadway network connectivity is dramatically different. Rancho Cordova Parkway and Americanos Boulevard would terminate within the Rio del Oro project site and would not extend southward to Douglas Road. The lack of roadway connectivity for this alternative would decrease traffic volumes on most roadways within the project. However, Sunrise Boulevard, Grant Line Road, White Rock Road, and Rio del Oro Parkway would incur additional traffic burdens, such that significant impacts on these facilities would occur. Additionally, a similar effect would occur at the interchanges with U.S. 50 in the project study area. It should be noted that this alternative is inconsistent with the City General Plan Circulation Element/Plan. This alternative would result in increased impacts on transportation infrastructure outside the Rio del Oro Specific Plan area. Implementation of this alternative would result in **significant and unavoidable** impacts. No feasible mitigation is available to reduce impacts under this alternative to a less-than-significant level because the project would not provide an internal roadway network that would be feasible, nor would project roadways connect appropriately to the City's planned circulation network under the City Circulation Element/Plan, thus resulting in additional traffic burden on transportation infrastructure outside of the project site.

Program Level and Project Level (Phase 1) Impacts and Mitigation Measures

IMPACT 3.14-1

Increases to Peak-Hour and Daily Traffic Volumes, Resulting in Unacceptable Levels of Service. *Implementation of development Phase 1 (i.e., the Baseline Plus Phase 1 scenario) and buildout of the specific plan (i.e., the Baseline Plus Full Buildout scenario) would cause an increase in a.m. peak-hour, p.m. peak-hour, and/or daily traffic volumes on area roadways, resulting in unacceptable LOS and warranting the need for improvements such as traffic signals and additional lanes.*

PP, HD, IM

Under all traffic analysis scenarios that assume implementation of development Phase 1 under the Proposed Project Alternative (i.e., the Baseline Plus Phase 1 scenario) and the Proposed Project, High Density, and Impact Minimization Alternatives at full project buildout (i.e., the Baseline Plus Full Buildout scenario), project implementation would affect LOS at study-area intersections. Exhibits 3.14-7, 3.14-8, and 3.14-9 present peak-hour traffic volumes, lane configurations, and traffic control under Baseline No Project, Baseline Plus Phase 1, and Baseline Plus Full Buildout conditions, respectively. Exhibits 3.14-10 and 3.14-11 compare ADT volumes under Baseline No Project conditions with those under Baseline Plus Phase 1 and Baseline Plus Full Buildout conditions, respectively. As shown in these exhibits, project

implementation would cause an increase in a.m. peak-hour, p.m. peak-hour, and/or daily traffic volumes at study-area intersections, roadway segments, and freeway ramps. Impacts associated with this increased traffic were compared against the thresholds of significance identified previously. For the sake of brevity, only intersections, roadways, and freeway ramps where **significant, direct** impacts would occur are discussed below, followed by required mitigation measures. There would be **no indirect** impacts in this context. Tables 3.14-10, 3.14-11, and 3.14-12 show intersections, roadway segments, and freeway ramps that would be affected by project implementation.

NP Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permit—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual implementation permits expected to be issued by the City. These activities would not generate traffic that would affect the regional transportation system.

Because no project-related development would occur under the No Project Alternative, there would be no project-generated traffic that would affect the regional transportation system; thus, **no direct** or **indirect** impacts would occur.

Mitigation Measure Common to All Impacts under Impact 3.14-1

To avoid repetition, the information contained in the following mitigation measure applies to all other mitigation measures required under Impact 3.14-1. Note that no mitigation measures are required for the No Project Alternative because, as described above, no direct or indirect impacts would occur.

PP, HD, IM The project applicant(s) for all project phases shall participate in the necessary improvements identified in all of the following mitigation measures. The project's fair-share participation and the associated timing of the improvements shall be identified in the project conditions of approval and in the mitigation monitoring and reporting program for the project, or in conjunction with and as an appendix to the specific plan (see mitigation measures following each identified impact).

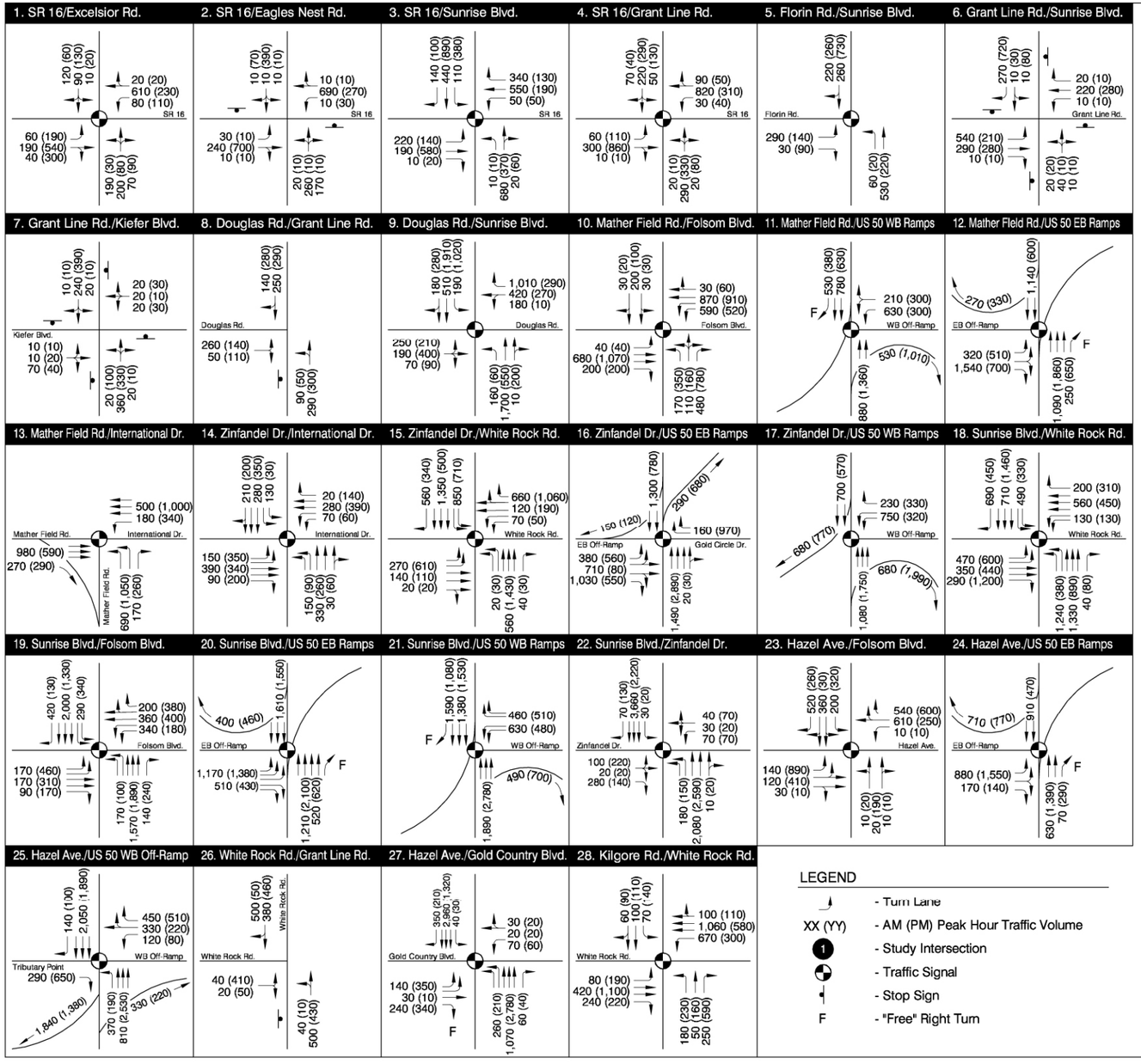
The timing and enforcement (described below) would be the same for all identified mitigation measures associated with Impact 3.14-1.

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Please note that the improvements described in each of the following mitigation measures have not been designed, and therefore, project-specific impacts resulting from these improvements cannot be precisely identified or quantified.

If need be, the site-specific impacts of the identified improvements will be assessed pursuant to CEQA requirements when specific intersection and roadway improvement plans are developed, separate from the Rio del Oro DEIR/DEIS. Any such necessary environmental review will be completed before final approval of the improvements identified in the mitigation measures. No such additional review may be necessary, however, if the effects of such improvements are consistent with what can generally be expected of such improvements, as set forth immediately below.

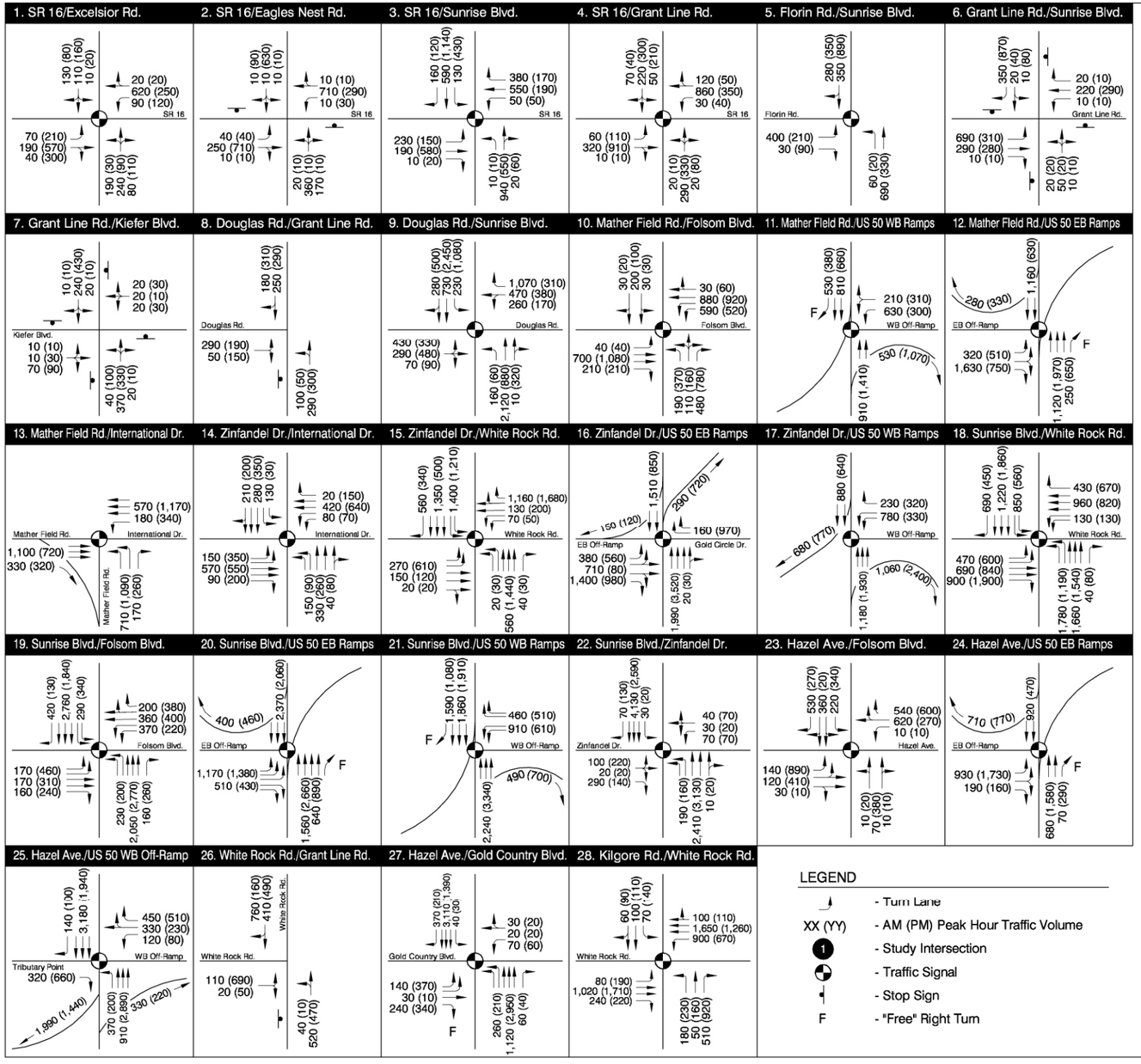


G 03110089.01 012

Source: Fehr & Peers 2006

Peak Hour Traffic Volumes, Lane Configurations, and Traffic Control-Baseline No Project Conditions

EXHIBIT 3.14-7

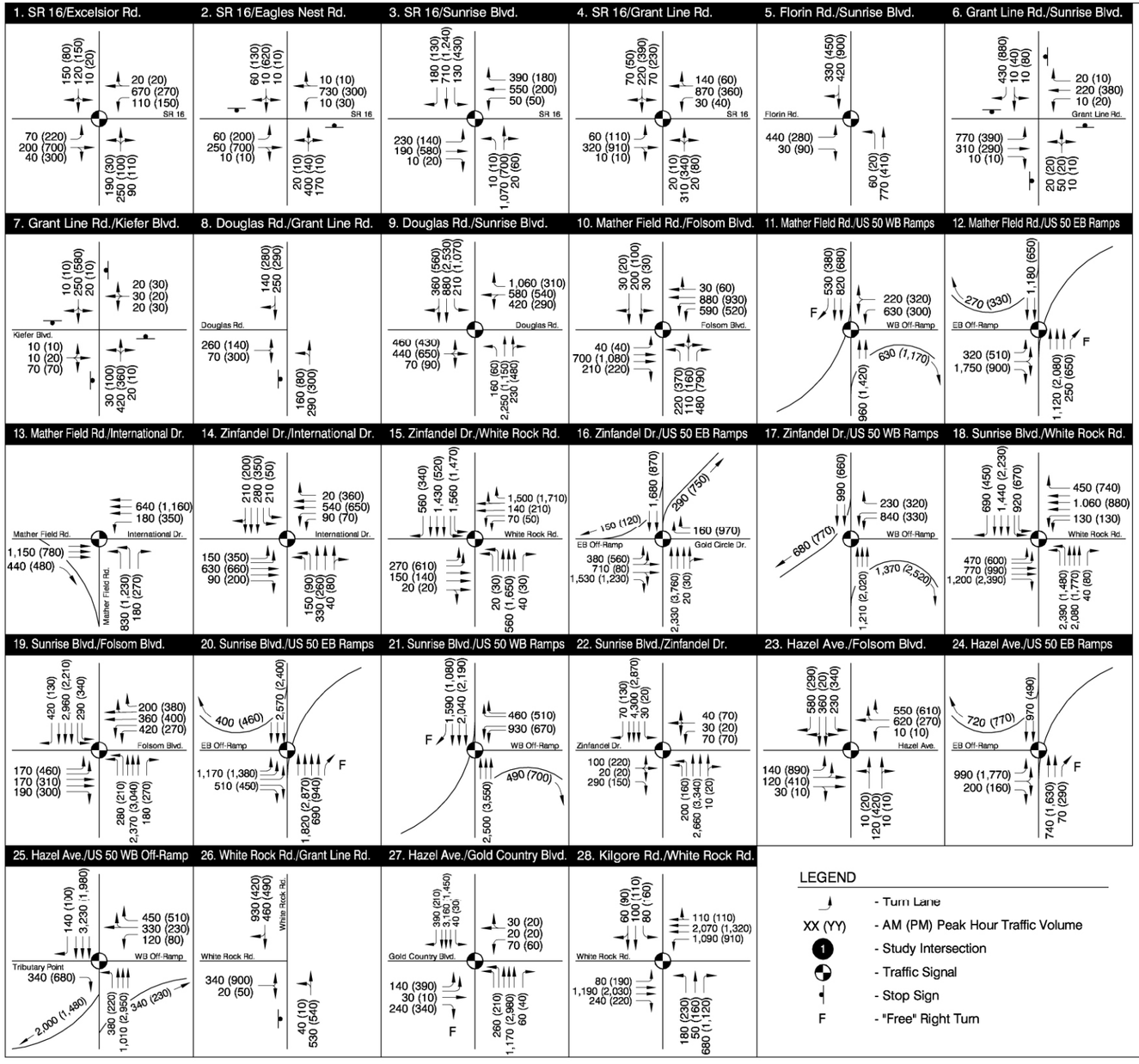


G 03110089.01 011

Source: Fehr & Peers 2006

Peak Hour Traffic Volumes, Lane Configurations, and Traffic Control-Baseline Plus Phase 1 Conditions

EXHIBIT 3.14-8

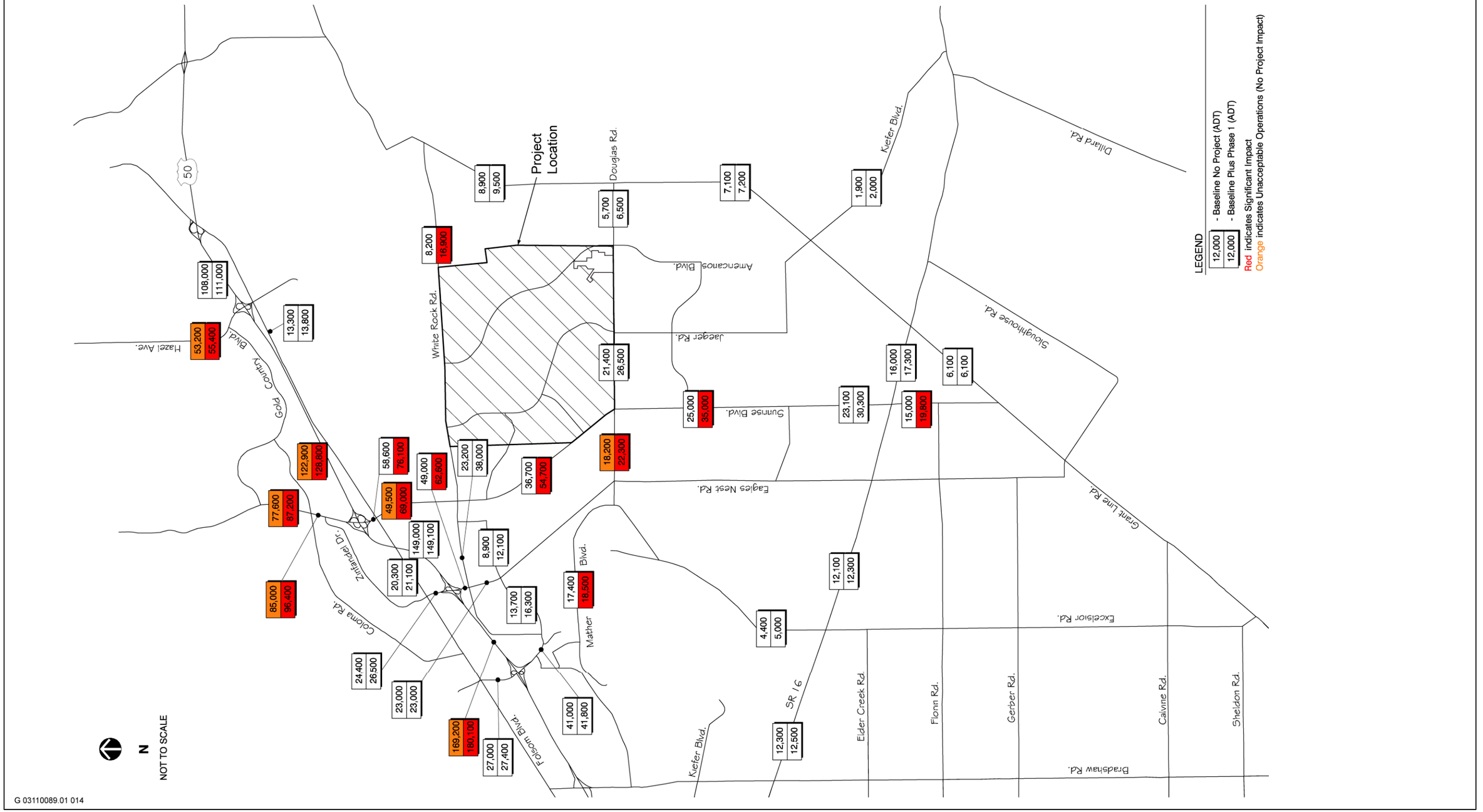


G 03110089.01 010

Source: Fehr & Peers 2006

Peak Hour Traffic Volumes, Lane Configurations, and Traffic Control-Baseline Plus Full Buildout Conditions

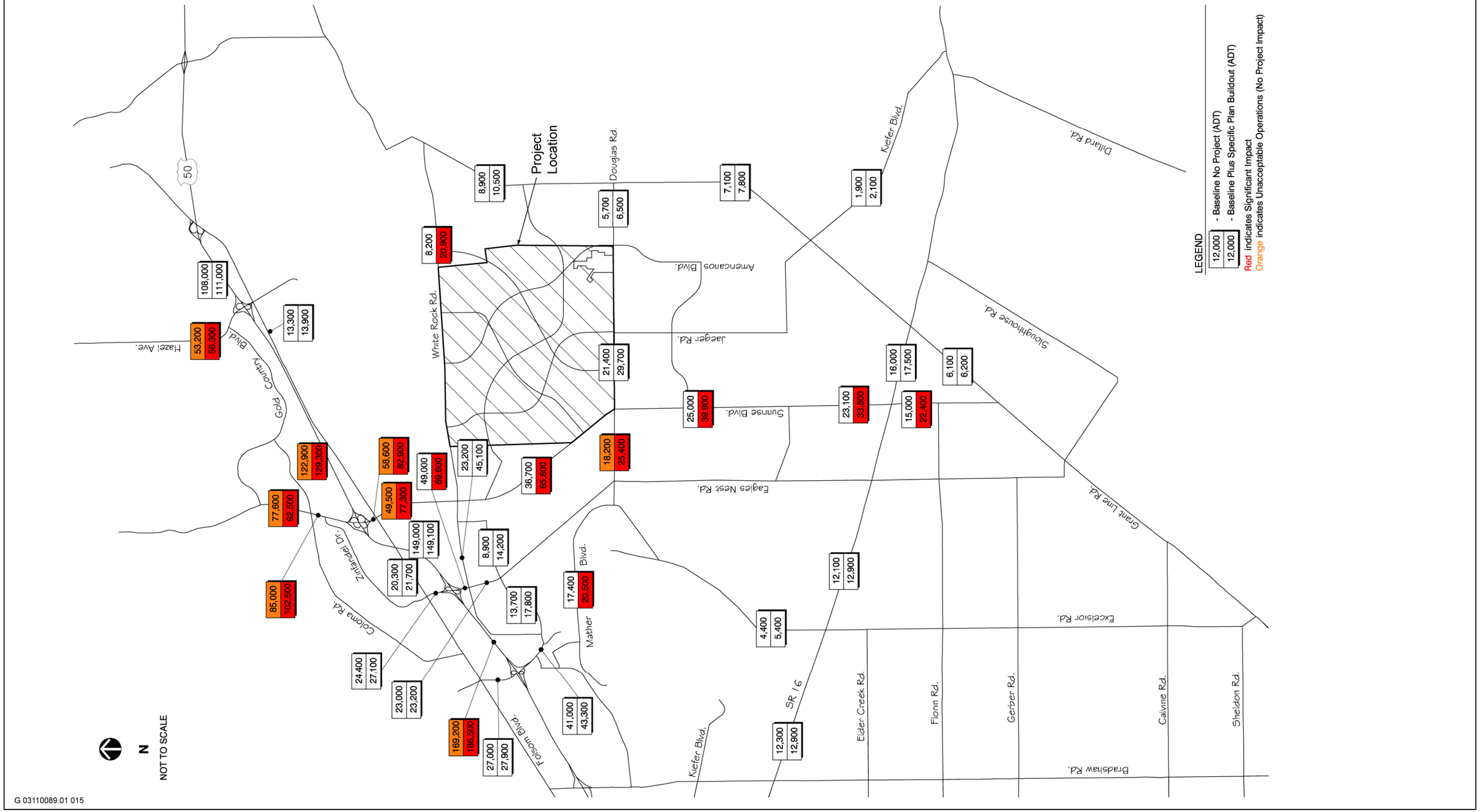
EXHIBIT 3.14-9



Source: Fehr & Peers 2006

Average Daily Traffic Volumes, Baseline Plus Phase 1 Conditions

EXHIBIT 3.14-10



Source: Fehr & Peers 2006

Average Daily Traffic Volumes, Baseline Plus Full Buildout Conditions

EXHIBIT 3.14-11

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
P 3T089.01 10/06

EDAW

Table 3.14-10
Intersection Levels of Service—Baseline Conditions

Intersection	Control	No Project Alternative				Phase 1				Proposed Project Alternative				High Density Alternative				Impact Minimization Alternative			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		V/C[1] or Delay[2]	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. SR 16/Excelsior Road	Signalized	0.91	E	0.91	E	**0.98**	**E**	**0.99**	**E**	**1.05**	**F**	**1.09**	**F**	**1.08**	**F**	**1.09**	**F**	**1.04**	**F**	**1.05**	**F**
2. SR 16/Eagles Nest Road	Side-street stop	>180	F	>180	F	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**
3. SR 16/Sunrise Boulevard	Signalized	1.05	F	1.02	F	**1.25**	**F**	**1.19**	**F**	**1.33**	**F**	**1.25**	**F**	**1.33**	**F**	**1.27**	**F**	**1.25**	**F**	**1.22**	**F**
4. SR 16/Grant Line Road	Signalized	1.09	F	1.19	F	**1.14**	**F**	**1.29**	**F**	**1.19**	**F**	**1.37**	**F**	**1.18**	**F**	**1.36**	**F**	**1.18**	**F**	**1.36**	**F**
5. Florin Road/Sunrise Boulevard	Signalized	0.54	A	0.74	C	0.70	C	**0.95**	**E**	0.81	D	**1.07**	**F**	0.81	D	**1.08**	**F**	0.75	C	**1.03**	**F**
6. Grant Line Road/Sunrise Boulevard	All-way stop	41	E	90	F	**105**	**F**	**166**	**F**	**150**	**F**	**>180**	**F**	**166**	**F**	**>180**	**F**	**124**	**F**	**>180**	**F**
7. Grant Line Road/Kiefer Boulevard	All-way stop	11	B	13	B	12	B	15	C	13	B	23	C	12	B	20	C	13	B	20	C
8. Douglas Road/Grant Line Road	Side-street stop	49	E	26	D	**79**	**F**	**45**	**E**	**112**	**F**	**60**	**F**	**89**	**F**	**49**	**E**	**97**	**F**	**48**	**E**
9. Douglas Road/Sunrise Boulevard	Signalized	1.08	F	1.00	E	**1.39**	**F**	**1.33**	**F**	**1.52**	**F**	**1.53**	**F**	**1.60**	**F**	**1.53**	**F**	**1.61**	**F**	**1.54**	**F**
10. Mather Field Road/Folsom Boulevard	Signalized	0.74	C	0.94	E	0.75	C	0.94	E	0.75	C	0.95	E	0.75	C	0.95	E	0.75	C	0.95	E
11. Mather Field Road/U.S. 50 westbound ramps	Signalized	0.54	A	0.60	B	0.55	A	0.62	B	0.57	A	0.63	B	0.57	A	0.62	B	0.57	A	0.63	B
12. Mather Field Road/U.S. 50 eastbound ramps	Signalized	0.86	D	0.65	B	0.90	D	0.68	B	**0.94**	**E**	0.73	C	**0.94**	**E**	0.72	C	**0.93**	**E**	0.72	C
13. Mather Field Road/International Drive	Signalized	0.57	A	0.72	C	0.61	B	0.76	C	0.66	B	0.83	D	0.71	C	0.83	D	0.68	B	0.82	D
14. Zinfandel Drive/International Drive	Signalized	0.35	A	0.43	A	0.41	A	0.51	A	0.43	A	0.54	A	0.43	A	0.50	A	0.44	A	0.52	A
15. Zinfandel Drive/White Rock Road	Signalized	0.62	B	0.93	E	0.82	D	**1.16**	**F**	0.89	D	**1.27**	**F**	0.89	D	**1.30**	**F**	0.88	D	**1.24**	**F**
16. Zinfandel Drive/U.S. 50 eastbound ramps	Signalized	0.93	E	1.03	F	**1.04**	**F**	**1.27**	**F**	**1.14**	**F**	**1.39**	**F**	**1.12**	**F**	**1.43**	**F**	**1.13**	**F**	**1.37**	**F**
17. Zinfandel Drive/U.S. 50 westbound ramps	Signalized	0.47	A	0.55	A	0.53	A	0.58	A	0.58	A	0.60	B	0.56	A	0.60	A	0.57	A	0.60	B
18. Sunrise Boulevard/White Rock Road	Signalized	1.22	F	1.31	F	**1.76**	**F**	**2.16**	**F**	**2.18**	**F**	**2.68**	**F**	**2.21**	**F**	**2.89**	**F**	**2.14**	**F**	**2.58**	**F**
19. Sunrise Boulevard/Folsom Boulevard	Signalized	0.70	B	0.90	D	**0.94**	**E**	**1.09**	**F**	**1.04**	**F**	**1.48**	**F**	**1.05**	**F**	**1.13**	**F**	**1.03**	**F**	**1.14**	**F**
20. Sunrise Boulevard/U.S. 50 eastbound ramps	Signalized	0.59	A	0.63	B	0.74	C	0.72	C	0.78	C	0.79	C	0.77	C	0.81	D	0.78	C	0.78	C
21. Sunrise Boulevard/U.S. 50 westbound ramps	Signalized	0.59	A	0.73	C	0.76	C	0.88	D	0.82	D	**0.94**	**E**	0.83	D	**0.95**	**E**	0.81	D	**0.93**	**E**
22. Sunrise Boulevard/Zinfandel Drive	Signalized	1.07	F	1.99	F	**1.18**	**F**	**2.11**	**F**	**1.22**	**F**	**2.15**	**F**	**1.21**	**F**	**2.15**	**F**	**1.22**	**F**	**2.14**	**F**
23. Hazel Avenue/Folsom Boulevard	Signalized	0.73	C	0.82	D	0.75	C	0.90	D	0.76	C	**0.92**	**E**	0.77	C	**0.91**	**E**	0.77	C	**0.92**	**E**
24. Hazel Avenue/U.S. 50 eastbound ramps	Signalized	0.57	A	0.94	E	0.59	A	**1.06**	**F**	0.62	B	**1.08**	**F**	0.62	B	**1.06**	**F**	0.62	B	**1.09**	**F**
25. Hazel Avenue/U.S. 50 westbound ramps	Signalized	1.16	F	0.89	D	1.19	F	**0.97**	**E**	1.20	F	**0.98**	**E**	1.20	F	**0.97**	**E**	1.21	F	**0.99**	**E**
26. White Rock Road/Grant Line Road	Side-street stop	25	C	>180	F	**78**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**	**>180**	**F**
27. White Rock Road/Kilgore Road	Signalized	0.82	D	1.05	F	**1.33**	**F**	**1.72**	**F**	**1.63**	**F**	**2.32**	**F**	**1.67**	**F**	**2.20**	**F**	**1.67**	**F**	**2.20**	**F**
28. Hazel Avenue/Gold Country Boulevard	Signalized	0.92	E	0.79	C	0.95	E	0.84	D	0.96	E	0.85	D	0.96	E	0.85	D	0.96	E	0.85	D

Notes: LOS = level of service; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity

[1] V/C ratio is shown for signalized intersections. Delay is shown for unsignalized intersections.

[2] Worst-case delay reported for unsignalized, side-street-stop intersections; average intersection delay reported for all-way-stop intersections. Both delays are reported in seconds per vehicle.

Shaded areas indicate deficiency. **Bold** indicates impact.
Source: Data provided by Fehr & Peers in 2005

Table 3.14-11
Roadway Segment Levels of Service—Baseline Conditions

Roadway Segment	Lanes	No Project Alternative			Phase 1			Proposed Project Alternative			High Density Alternative			Impact Minimization Alternative		
		Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
1. SR 16—Excelsior Road to Eagles Nest Road	2	12,100	0.67	B	12,300	0.68	B	12,900	0.72	C	13,000	0.72	C	12,800	0.71	C
2. SR 16—Sunrise Boulevard to Grant Line Road	2	16,000	0.89	D	17,300	0.96	E	17,500	0.97	E	17,500	0.97	E	17,500	0.97	E
3. Kiefer Boulevard—Grant Line Road to north of SR 16[1]	2	1,900	0.11	B	2,000	0.12	B	2,100	0.12	B	2,100	0.12	B	2,100	0.12	B
4. Mather Boulevard—Femoyer Street to Douglas Road	2	17,400	0.97	E	**18,500**	**1.03**	**F**	**20,500**	**1.14**	**F**	**21,700**	**1.21**	**F**	**20,300**	**1.13**	**F**
5. Douglas Road—Mather Boulevard to Sunrise Boulevard	2	18,200	1.01	F	**22,300**	**1.24**	**F**	**25,400**	**1.41**	**F**	**27,100**	**1.51**	**F**	**25,300**	**1.41**	**F**
6. International Drive—South White Rock Road to Zinfandel Drive	4	13,700	0.38	A	16,300	0.45	A	17,800	0.49	A	17,900	0.50	A	17,700	0.49	A
7. International Drive—Zinfandel Drive to Kilgore Road	4	8,900	0.25	A	12,100	0.34	A	14,200	0.39	A	14,300	0.40	A	14,100	0.39	A
8. White Rock Road—Zinfandel Drive to Sunrise Boulevard	6	23,200	0.43	A	38,000	0.70	C	45,100	0.84	D	46,000	0.85	D	43,900	0.81	D
9. White Rock Road—Sunrise Boulevard to Grant Line Road	2	8,200	0.46	A	**16,900**	**0.94**	**E**	**20,900**	**1.16**	**F**	**21,100**	**1.17**	**F**	**20,400**	**1.13**	**F**
10. Folsom Boulevard—Zinfandel Drive to Sunrise Boulevard	4	20,300	0.56	A	21,100	0.59	A	21,700	0.60	B	21,800	0.61	B	21,700	0.60	B
11. Folsom Boulevard—Sunrise Boulevard to Hazel Avenue	2	13,300	0.74	C	13,800	0.77	C	13,900	0.77	C	13,900	0.77	C	13,900	0.77	C
12. Mather Field Road—Folsom Boulevard to U.S. 50 westbound ramps	4	27,000	0.75	C	27,400	0.76	C	27,900	0.78	C	28,100	0.78	C	27,700	0.77	C
13. Mather Field Road—U.S. 50 eastbound ramps to International Drive	6	41,000	0.76	C	41,800	0.77	C	43,300	0.80	D	44,200	0.82	D	43,200	0.80	D
14. Zinfandel Drive—Folsom Boulevard to U.S. 50 westbound ramps	4	24,400	0.68	B	26,500	0.74	C	27,100	0.75	C	27,100	0.75	C	27,200	0.76	C
15. Zinfandel Drive—U.S. 50 eastbound ramps to White Rock Road	6	49,000	0.91	E	**62,600**	**1.16**	**F**	**69,600**	**1.29**	**F**	**70,500**	**1.31**	**F**	**68,500**	**1.27**	**F**
16. Zinfandel Drive—White Rock Road to International Drive	6	23,000	0.43	A	23,000	0.43	A	23,200	0.43	A	23,200	0.43	A	23,200	0.43	A
17. Sunrise Boulevard—Gold Country Boulevard to Coloma Road	6	77,600	1.44	F	**87,200**	**1.61**	**F**	**92,500**	**1.71**	**F**	**93,300**	**1.73**	**F**	**92,000**	**1.70**	**F**
18. Sunrise Boulevard—Coloma Road to U.S. 50 westbound ramps	6	85,000	1.57	F	**96,400**	**1.79**	**F**	**102,500**	**1.90**	**F**	**103,400**	**1.91**	**F**	**101,800**	**1.89**	**F**
19. Sunrise Boulevard—U.S. 50 eastbound ramps to Folsom Boulevard	6	58,600	1.09	F	**76,100**	**1.41**	**F**	**82,900**	**1.54**	**F**	**83,900**	**1.55**	**F**	**82,100**	**1.52**	**F**
20. Sunrise Boulevard—Folsom Boulevard to White Rock Road	6	49,500	0.92	E	**69,000**	**1.28**	**F**	**77,300**	**1.43**	**F**	**78,400**	**1.45**	**F**	**76,400**	**1.41**	**F**
21. Sunrise Boulevard—White Rock Road to Douglas Road	6	36,700	0.68	B	**54,700**	**1.01**	**F**	**65,600**	**1.21**	**F**	**67,600**	**1.25**	**F**	**63,900**	**1.18**	**F**
22. Sunrise Boulevard—SR 16 to Grant Line Road	2	15,000	0.83	D	**19,800**	**1.10**	**F**	**22,400**	**1.24**	**F**	**22,600**	**1.26**	**F**	**21,900**	**1.22**	**F**
23. Hazel Avenue—Winding Way to U.S. 50 westbound ramps[2]	4	53,200	1.33	F	**55,400**	**1.39**	**F**	**56,300**	**1.41**	**F**	**56,300**	**1.41**	**F**	**56,200**	**1.41**	**F**
24. Grant Line Road—White Rock Road to Douglas Road	2	8,900	0.49	A	9,500	0.53	A	10,500	0.58	A	11,000	0.61	B	10,400	0.58	A
25. Grant Line Road—Douglas Road to SR 16	2	7,100	0.39	A	7,200	0.40	A	7,800	0.43	A	7,800	0.43	A	7,800	0.43	A
26. Grant Line Road—SR 16 to Sunrise Boulevard	2	6,100	0.34	A	6,100	0.34	A	6,200	0.34	A	6,300	0.35	A	6,200	0.34	A
27. U.S. 50—Mather Field Road to Zinfandel Drive	8	169,200	1.06	F	**180,100**	**1.13**	**F**	**186,500**	**1.17**	**F**	**187,200**	**1.17**	**F**	**185,300**	**1.16**	**F**
28. U.S. 50—Zinfandel Drive to Sunrise Boulevard	8	149,000	0.93	E	149,100	0.93	E	149,100	0.93	E	149,100	0.93	E	149,100	0.93	E
29. U.S. 50—Sunrise Boulevard to Hazel Avenue	6	122,900	1.02	F	**128,800**	**1.07**	**F**	**129,300**	**1.08**	**F**	**129,400**	**1.08**	**F**	**129,300**	**1.08**	**F**
30. U.S. 50—Hazel Avenue to Folsom Boulevard	6	108,000	0.90	D	111,000	0.93	D	111,000	0.93	D	110,400	0.92	D	110,500	0.92	D
31. Douglas Road—Sunrise Boulevard to Jaeger Road	4	21,400	0.59	A	26,500	0.74	C	29,700	0.83	D	**32,500**	**0.90**	**E**	27,200	0.76	C
32. Douglas Road—Americanos Boulevard to Grant Line Road	2	5,700	0.32	A	6,500	0.36	A	6,500	0.36	A	6,400	0.36	A	6,400	0.36	A
33. Sunrise Boulevard—Douglas Road to Kiefer Boulevard	4	25,000	0.69	B	**35,000**	**0.97**	**E**	**39,900**	**1.11**	**F**	**40,600**	**1.13**	**F**	**39,000**	**1.08**	**F**
34. Sunrise Boulevard—Kiefer Boulevard to SR 16	4	23,100	0.64	B	30,300	0.84	D	**33,800**	**0.94**	**E**	**34,100**	**0.95**	**E**	**33,100**	**0.92**	**E**
35. Excelsior Road—north of SR 16	2	4,400	0.24	A	5,000	0.28	A	5,400	0.30	A	5,700	0.32	A	5,400	0.30	A
36. SR 16—west of Excelsior Road	2	12,300	0.68	B	12,500	0.69	B	12,900	0.72	C	13,200	0.73	C	12,900	0.72	C

Notes: LOS = level of service; SR = State Route; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity
[1] Not expected to be a through roadway for baseline conditions.
[2] Assumed to have high access control.
Shaded areas indicate deficiency. **Bold** indicates impact.
Source: Data provided by Fehr & Peers in 2005

Table 3.14-12
Merge/Diverge/Weave Levels of Service—Baseline Conditions

Freeway Ramp	Merge, Diverge, or Weave Maneuver	No Project Alternative				Phase 1				Proposed Project Alternative				High Density Alternative				Impact Minimization Alternative			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		Density[1]	LOS[2]	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS
EASTBOUND U.S. 50																					
Mather Field Road direct off-ramp	Diverge	47	F	43	F	49	F	45	F	51	F	48	F	51	F	48	F	51	F	47	F
Mather Field Road loop on-ramp	Merge	23	C	24	C	24	C	25	C	25	C	25	C	25	C	26	C	25	C	25	C
Mather Field Road direct on-ramp	Merge	23	C	23	C	24	C	24	C	24	C	24	C	24	C	24	C	24	C	24	C
Zinfandel Drive direct off-ramp	Diverge	24	C	19	B	28	D	23	C	30	F	26	C	29	F	25	F	30	F	25	C
Zinfandel Drive loop on-ramp	Merge	20	B	25	C	20	C	25	C	20	C	25	C	20	C	27	C	20	C	25	C
Zinfandel Drive direct on-ramp	Merge	20	B	25	C	20	B	25	C	20	C	25	C	20	C	25	C	20	C	25	C
Sunrise Boulevard direct off-ramp	Diverge	23	C	32	F	23	C	32	F	23	C	32	F	23	C	32	F	23	C	32	F
Sunrise Boulevard loop/direct on-ramp	Merge	28	C	36	E	29	D	38	F	29	D	39	F	30	D	39	F	29	D	39	F
Hazel Avenue direct off-ramp	Diverge	16	B	25	C	16	B	27	C	17	B	27	C	17	B	27	C	17	B	27	C
Hazel Avenue loop/direct on-ramp Aerojet direct off-ramp	Weave	NA	C	NA	D	NA	C	NA	D	NA	C	NA	D	NA	C	NA	D	NA	C	NA	D
WESTBOUND U.S. 50																					
Hazel Avenue direct off-ramp	Diverge	44	F	37	E	45	F	37	E	46	F	37	E	45	F	37	E	45	F	37	E
Hazel Avenue loop on-ramp	Merge	37	E	30	D	38	E	30	D	38	E	30	D	38	E	30	D	38	E	30	D
Sunrise Boulevard direct off-ramp	Diverge	22	C	15	B	25	C	16	B	25	C	16	B	25	C	17	B	25	C	17	B
Zinfandel Drive direct off-ramp	Diverge	38	E	29	D	38	E	29	D	39	E	29	D	38	E	30	D	39	E	29	D
Zinfandel Drive loop on-ramp	Merge	29	D	28	C	30	D	29	D	30	D	29	D	30	D	29	D	30	D	29	D
Zinfandel Drive direct on-ramp	Merge	37	F	38	F	39	F	40	F	40	F	40	F	41	F	40	F	40	F	40	F
Mather Field Road direct off-ramp	Diverge	38	E	37	E	39	E	39	E	41	F	40	F	41	F	40	E	40	F	39	E
Mather Field Road loop on-ramp	Merge	30	D	32	D	32	D	33	F	33	D	33	F	33	D	33	F	32	D	33	F
Mather Field Road direct on-ramp	Merge	39	F	44	F	41	F	47	F	43	F	48	F	44	F	48	F	43	F	47	F

Notes:
LOS = level of service; NA = not applicable; U.S. 50 = U.S. Highway 50.
[1] Density in passenger cars per mile per lane for merge/diverge analysis only.
[2] LOS computed using Highway Capacity Software (HCS) 2000 software for the merge/diverge analysis consistent with *Highway Capacity Manual* (HCM) 2000 methodologies. Weave analysis evaluated using the Leisch Method for Weaving Analysis.
Shaded areas indicate deficiency where calculation indicates that demand exceeds capacity.
Source: Data provided by Fehr & Peers in 2005

Based on review of existing available environmental documentation, field review at a reconnaissance level, and review of aerial photography, it is anticipated that, at worst, the construction of these intersection and roadway improvements could directly adversely affect wetland resources and associated grassland habitat area and could result in construction-related environmental effects, including but not limited to:

- impacts related to construction traffic, noise, air quality, water quality, and drainage;
- impacts on cultural resources; and
- impacts on special-status plants and animals and their habitats.

In addition to construction-related impacts, implementation of these improvements could result in long-term effects on water quality and drainage. The impacts that could arise from the planned improvements would be measured using the significance thresholds identified in each section of Chapter 3 of this DEIR/DEIS.

Once a planned roadway is designed, the City would retain a qualified biologist to conduct a reconnaissance survey to determine the type(s) of habitat to be removed, and whether wetlands or special-status species are present. The City would also conduct a cultural resources records search to determine whether any known cultural resources are present.

The mitigation measures recommended in Chapter 3 of this DEIR/DEIS would be applied (where applicable) to mitigate any such effects, if significant, to less-than-significant levels. For example, measures would be implemented to ensure no net loss of wetlands. Best management practices and Sacramento Metropolitan Air Quality Management District measures would be implemented for water and air quality effects, and preconstruction surveys would be performed where sensitive habitat is present (and if special-status species or habitat is present, the biological resources protection measures would be implemented). The relocation of any utility pole or other utilities would be coordinated with the appropriate service provider to ensure that there would be no impact on the service provider. Additionally, if permits or other authorizations are required, they would be secured and the conditions would be followed.

For improvements to the following intersections and roadway improvements, the following impacts (in addition to the above) could result from implementation of required improvements:

- Direct impacts on the Folsom South Canal from implementation of the Zinfandel Drive and International Drive Extensions—Sunrise Boulevard/Douglas Road, Sunrise Boulevard/White Rock Road, and Sunrise Boulevard/Folsom Boulevard intersections (Intersections 9, 18, and 19, respectively)

- Direct impacts from the required grade separation structure—Sunrise Boulevard/Zinfandel Drive intersection (Intersection 22)

- Direct impacts from potential widening of the structure across U.S. 50—Hazel Avenue/U.S. 50 eastbound ramps and Hazel Avenue/U.S. 50 westbound ramps intersections (Intersections 24 and 25, respectively)

- Direct impacts on the Folsom South Canal from implementation of the International Drive Extension—Kilgore Road/White Rock Road intersection (Intersection 27)

- Direct impacts from required widening of the existing crossing of the Folsom South Canal—Douglas Road between Mather Boulevard and Sunrise Boulevard (Roadway Segment 5)

- Direct impacts from potential removal of approximately 40 large trees (primarily oak trees) and associated (primarily grassland) vegetation, and approximately 100 power poles, resulting from improvements to White Rock Road between Sunrise Boulevard and Grant Line Road (Roadway Segment 9)

- Direct impacts from required new river crossings of the American River—Sunrise Boulevard between Gold Country Boulevard and Coloma Road and Sunrise Boulevard between Coloma Road and the U.S. 50 westbound ramps (Roadway Segments 17 and 18, respectively)

- Direct impacts from potential removal of approximately 80 utility poles, 60 street lights, approximately 50 large trees, and commercial/industrial property, resulting from improvements to Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20)

- Direct impacts from potential removal of approximately 60 utility poles, 100 street lights, approximately 40 large trees (primarily oak trees and landscaped trees), and commercial/industrial property, resulting from improvements to Sunrise Boulevard between White Rock Road and Douglas Road (Roadway Segment 21)

- Direct impacts from potential removal of approximately 35 utility poles and two trees, as well as other vegetation, resulting from improvements to Douglas Road between Jaeger Road and Sunrise Boulevard (Roadway Segment 31)

- Direct impacts from potential removal of approximately 50 power poles, resulting from improvements to Sunrise Boulevard between Douglas Road and Kiefer Boulevard (Roadway Segment 33)

- Direct impacts on an already congested Sunrise Boulevard corridor

Regarding the Sunrise Boulevard corridor, phasing of circulation improvements, consistent with the City's Infrastructure Phasing Plan, would aid in minimizing impacts on intersections and roadway segments on Sunrise Boulevard and should be considered when prioritizing improvements for implementation.

NP No mitigation measures are required.

The following impacts and mitigation measures apply only to those intersections, roadways, and freeway ramps where significant, direct impacts would occur. Summary impacts are followed by required mitigation measures. Note that no mitigation measures are required for Impacts 3.14-1a through 3.14-1jj under the No Project Alternative. As stated above in the summary discussion of Impact 3.14-1, under this alternative there would be no project-related traffic that would affect the regional transportation system; therefore, there would be no direct or indirect impacts under the No Project Alternative.

IMPACT 3.14-1a

Unacceptable LOS at the SR 16/Excelsior Road Intersection (Intersection 1). *Signalized intersection operations at SR 16/Excelsior Road would degrade from LOS E to LOS F during both the a.m. and p.m. peak traffic hours with project-related traffic both under both development Phase 1 and full project buildout.*

Mitigation Measure 3.14-1a: Participate in Improvements to the SR 16/Excelsior Road Intersection (Intersection 1).

PP, HD, IM To ensure that the SR 16/Excelsior Road intersection operates at an acceptable LOS, all of the following improvements are required:

- The northbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.
- The southbound approach must be reconfigured to consist of two left-turn lanes, two through lanes, and one right-turn lane.
- The eastbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one right-turn lane.
- The westbound approach must be reconfigured to consist of one left-turn lane, two through lanes, and one right-turn lane.

These improvements would require widening of SR 16 east and west of the intersection to accommodate the additional lanes.

Improvements to the SR 16/Excelsior Road intersection are contained within the *SunRidge Specific Plan Public Facilities Financing Plan* and zoning conditions. The CEQA Findings of Fact and Statement of Overriding Considerations for the Sunrise Douglas Community Plan/SunRidge Specific Plan Project state that physical improvement of this intersection is feasible. Implementation of the improvements described above would assist in reducing traffic impacts on this intersection by providing acceptable operations. If these improvements are completed concurrent with development of the SunRidge Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1a would reduce the significant impact on Intersection 1 under development Phase 1 (Proposed Project Alternative) and at full buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to operate at an acceptable LOS D or better. However, the identified improvements, including the necessary widening of SR 16 east and west of the intersection, fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1b

Unacceptable LOS at the SR 16/Eagles Nest Road Intersection (Intersection 2). *The unsignalized intersection of SR 16/Eagles Nest Road would operate at LOS F during the a.m. and p.m. peak traffic hours with and without project-related traffic both under development Phase 1 and at full project buildout. Project-related traffic would increase the delay for the worst-case approach at this intersection by more than 5 seconds during the peak traffic hours.*

Mitigation Measure 3.14-1b: Participate in Improvements at the SR 16/Eagles Nest Road Intersection (Intersection 2).

PP, HD, IM To ensure that the SR 16/Eagles Nest Road intersection operates at an acceptable LOS, a traffic signal must be installed at this intersection, and the eastbound and westbound approaches must be reconfigured to consist of one left-turn lane, one through lane, and one shared through/right-turn lane.

These improvements would require widening of SR 16 for 1,000 feet on both sides of this intersection to accommodate the additional through lanes.

Improvements to the SR 16/Eagles Nest Road intersection are contained within the *SunRidge Specific Plan Public Facilities Financing Plan* and zoning conditions. The CEQA Findings of Fact and Statement of Overriding Considerations for the Sunrise Douglas Community Plan/SunRidge Specific Plan Project state that physical improvement of this intersection is feasible. Implementation of the improvements described above, including the necessary widening of SR 16, would assist in reducing traffic impacts on this intersection. If these improvements are completed concurrent with development of the SunRidge Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1b would reduce the significant impact on Intersection 2 under development Phase 1 (Proposed Project Alternative) and at full buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to operate at an acceptable LOS D or better. However, the identified improvements fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1c

Unacceptable LOS at the SR 16/Sunrise Boulevard Intersection (Intersection 3). *The signalized intersection of SR 16/Sunrise Boulevard would operate at LOS F during the a.m. and p.m. peak traffic hours with and without project-related traffic both under development Phase 1 and at full project buildout. Project-related traffic would increase the critical V/C ratio by more than 0.05.*

Mitigation Measure 3.14-1c: Participate in Improvements to the SR 16/Sunrise Boulevard Intersection (Intersection 3).

PP, HD, IM To ensure that the SR 16/Sunrise Boulevard intersection operates at an acceptable LOS, the northbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one shared through/right-turn lane; and the southbound approach must be reconfigured to consist of one left-turn lane, two through lanes, and one right-turn lane.

An additional through lane would be needed in the eastbound and westbound directions, which would require widening of SR 16 on both sides of the intersection for a minimum of 1,000 feet in both directions. With these improvements, this intersection would operate at an acceptable LOS.

Improvements to the SR 16/Sunrise Boulevard intersection are contained within the County Development Fee Program, are scheduled for Measure A funding, and are within the *Mather Field Specific Plan Financing Plan*. Implementation of the improvements described above, including the necessary widening of SR 16, would assist in reducing traffic impacts on this intersection. If these improvements are completed concurrent with development of the Mather

Field Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1c would reduce the significant impact on Intersection 3 under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1d

Unacceptable LOS at the SR 16/Grant Line Road Intersection (Intersection 4). *The signalized intersection of SR 16/Grant Line Road would operate at LOS F during the a.m. and p.m. peak traffic hours with and without project-related traffic both under development Phase 1 and at full project buildout. However, project-related traffic would also increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-1d: Participate in Improvements to the SR 16/Grant Line Road Intersection (Intersection 4).

PP, HD, IM

To ensure that the SR 16/Grant Line Road intersection operates at an acceptable LOS, all of the following improvements are required:

- The northbound and southbound approaches must be reconfigured to consist of one left-turn lane and one shared through/right-turn lane.
- Protected left-turn signal phasing must be provided on the northbound and southbound approaches.
- The eastbound and westbound approaches must be reconfigured to consist of one left-turn lane, one through lane, and a shared through/right-turn lane.

These improvements would require widening of SR 16 1,000 feet on both sides of the intersection.

Improvements to the SR 16/Grant Line Road intersection are contained within the County Development Fee Program, are scheduled for Measure A funding, and are within the *Mather Field Specific Plan Financing Plan.* Implementation of the improvements described above, including the necessary widening of SR 16, would assist in reducing traffic impacts on this intersection; with them, this intersection would operate at an acceptable LOS. If these improvements are completed concurrent with development of the Mather Field Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1d would reduce the significant impact on Intersection 4 under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to

operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1e

Unacceptable LOS at the Florin Road/Sunrise Boulevard Intersection (Intersection 5). *Signalized intersection operations at Florin Road/Sunrise Boulevard would degrade from LOS C to LOS E during the p.m. peak traffic hour with project-related traffic from development Phase 1, and from LOS C to LOS F during the p.m. peak traffic hour with the traffic under full project buildout.*

Mitigation Measure 3.14-1e: Participate in Improvements to the Florin Road/Sunrise Boulevard Intersection (Intersection 5).

PP, HD, IM To ensure that the Florin Road/Sunrise Boulevard intersection operates at an acceptable LOS, the southbound approach must be reconfigured to consist of one through lane and one dedicated right-turn lane. Improvements to this intersection must be coordinated with the County and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1e would reduce the significant impact on Intersection 5 under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1f

Unacceptable LOS at the Grant Line Road/Sunrise Boulevard Intersection (Intersection 6). *Unsignalized intersection operations at Grant Line Road/Sunrise Boulevard would degrade from an acceptable LOS E during the a.m. peak traffic hour and an unacceptable LOS F during the p.m. peak traffic hour, to an unacceptable LOS F during both the a.m. and p.m. peak traffic hours with project-related traffic from development Phase 1 and full project buildout. In addition, project traffic would increase delay on the worst-case approach by more than 5 seconds during the p.m. peak traffic hour.*

Mitigation Measure 3.14-1f: Participate in Improvements to the Grant Line Road/Sunrise Boulevard Intersection (Intersection 6).

PP, HD, IM To ensure that the Grant Line Road/Sunrise Boulevard intersection operates at an acceptable LOS, all of the following improvements are required:

- A traffic signal must be installed at this intersection.
- The southbound approach must be reconfigured to consist of one left-turn lane, one through lane, and two dedicated right-turn lanes.
- The northbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one right-turn lane.
- Protected left-turn phases must be provided on the northbound and southbound approaches.

- A second eastbound left-turn lane must be added.
- Adequate receiving lanes must be provided on Sunrise Boulevard and Grant Line Road to accommodate the identified intersection geometrics.

Interim improvements to the Grant Line Road/Sunrise Boulevard intersection are contained within the Elk Grove West Vineyard Plan, with ultimate improvements within the *Vineyard Springs Comprehensive Plan Public Facilities Financing Plan*. Implementation of the improvements described above would assist in reducing traffic impacts on this intersection. If the improvements are completed concurrent with development of the West Vineyard Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1f would reduce the significant impact on Intersection 6 under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a less-than-significant level, by allowing the intersection to operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1g

Unacceptable LOS at the Grant Line Road/Douglas Road Intersection (Intersection 8). *Unsignalized intersection operations at Grant Line Road/Douglas Road would degrade from LOS E during the a.m. peak traffic hour and LOS D during the p.m. peak traffic hour to LOS F during both the a.m. and p.m. peak traffic hours with project-related traffic from development Phase 1 and full project buildout.*

Mitigation Measure 3.14-1g: Participate in Improvements to the Grant Line Road/Douglas Road Intersection (Intersection 8).

PP, HD, IM To ensure that the Grant Line Road/Douglas Road intersection operates at an acceptable LOS, a traffic signal must be installed at this intersection.

Improvements to the Grant Line Road/Douglas Road intersection are contained within the *SunRidge Specific Plan Public Facilities Financing Plan.* Implementation of the improvement described above would assist in reducing traffic impacts on this intersection. If this improvement is completed concurrent with development of the SunRidge Specific Plan and implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Implementation of Mitigation Measure 3.14-1g would reduce the significant impact on Intersection 8 under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives to a **less-than-significant** level.

IMPACT 3.14-1h

Unacceptable LOS at the Sunrise Boulevard/Douglas Road Intersection (Intersection 9). *Signalized intersection operations at Sunrise Boulevard/Douglas Road would degrade from LOS F during the a.m. peak traffic hour and LOS E during the p.m. peak traffic hour, to LOS F during both the a.m. and p.m. peak traffic hours with project-related traffic from development Phase 1 and full project buildout. In addition, project traffic would increase the V/C ratio at the intersection by more than 0.05.*

Mitigation Measure 3.14-1h: Participate in Improvements to the Sunrise Boulevard/Douglas Road Intersection (Intersection 9).

PP, HD, IM Improvements must be made to ensure that the Sunrise Boulevard/Douglas Road intersection operates at an acceptable LOS. Specifically, all approaches must be reconfigured to consist of two left-turn lanes, three through lanes, and one right-turn lane. However, with implementation of this improvement, the intersection would continue to operate at an unacceptable LOS E or LOS F.

To further improve operations at the intersection, additional roadway connectivity is required. To achieve this connectivity, the Zinfandel Drive Extension must be implemented (to accommodate traffic generated within the SunRidge Specific Plan area), International Drive must be extended to Sunrise Boulevard and into and through the Rio del Oro project site, and Rancho Cordova Parkway (and its connection to U.S. 50) must be implemented.

Improvements to this intersection are contained within the *SunRidge Specific Plan Public Facilities Financing Plan*. The extension of Zinfandel Drive is identified as part of the *Mather Field Specific Plan Public Facilities Financing Plan*. Funding has been identified for Rancho Cordova Parkway and the interchange and for the extension of International Drive to Sunrise Boulevard within the City's CIP program. Implementation of the improvements identified above would assist in reducing traffic impacts on this intersection.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1h would reduce the significant impact on Intersection 9 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the identified improvements are not under the City's jurisdiction. The Zinfandel Drive Extension falls under the jurisdiction of the County, and Rancho Cordova Parkway and its associated interchange fall under the jurisdiction of Caltrans and the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1i Unacceptable LOS at the Mather Field Road/U.S. 50 Eastbound Ramps (Intersection 12). *Signalized intersection operations at Mather Field Road/U.S. 50 eastbound ramps would degrade from LOS D during the a.m. peak traffic hour to LOS F during both the a.m. peak traffic hour with project-related traffic from full project buildout.*

Mitigation Measure 3.14-1i: Participate in Improvements to the Mather Field Road/U.S. 50 Eastbound Ramps Intersection (Intersection 12).

PP, HD, IM Improvements must be made to ensure that the Mather Field Road/U.S. 50 eastbound ramps intersection operates at an acceptable LOS. Specifically, the eastbound ramp needs modification to make the eastbound right turn a "free" movement. This would require a receiving lane on Mather Field Road, south of the intersection.

To further improve operations at the intersection, additional roadway connectivity is required. To achieve this connectivity, the Zinfandel Drive Extension must be implemented (to accommodate traffic generated within the SunRidge Specific Plan area), International Drive must be extended

to Sunrise Boulevard and into and through the Rio del Oro project site, and Rancho Cordova Parkway (and its connection to U.S. 50) must be implemented.

The extension of Zinfandel Drive is identified as part of the *Mather Field Specific Plan Public Facilities Financing Plan*. Funding has been identified for Rancho Cordova Parkway and the interchange and for the extension of International Drive to Sunrise Boulevard within the City's CIP program. Implementation of the improvements identified above would assist in reducing traffic impacts on this intersection.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1i would reduce the significant impact on Intersection 12 to a less-than-significant level by improving intersection LOS under full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the identified improvements are not under the City's jurisdiction. The intersection is ultimately controlled by Caltrans. The Zinfandel Drive Extension falls under the jurisdiction of the County, and Rancho Cordova Parkway and its associated interchange fall under the jurisdiction of Caltrans and the County. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of these improvements. Thus, this impact would remain **significant and unavoidable.** If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1j

Unacceptable LOS at the Zinfandel Drive/White Rock Road Intersection (Intersection 15). *Signalized intersection operations at Zinfandel Drive/White Rock Road would degrade from an unacceptable LOS E to an unacceptable LOS F during the a.m. peak traffic hour with project-related traffic from development Phase 1 and full project buildout. This intersection would operate at an unacceptable level both with and without project traffic. However, the V/C ratio at the intersection would increase by more than 0.05 with project traffic.*

Mitigation Measure 3.14-1j: Participate in Improvements to the Zinfandel Drive/White Rock Road Intersection (Intersection 15).

PP, HD, IM To offset project-related impacts at the Zinfandel Drive/White Rock Road intersection, all of the following improvements are required:

- The southbound approach must be reconfigured to consist of three left-turn lanes, two through lanes, and one right-turn lane.
- The eastbound approach must be reconfigured to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane.
- The westbound approach must be reconfigured to consist of two left-turn lanes, three through lanes, and one free right-turn lane.

Although these improvements offset the impacts of the project, this intersection would still operate at an unacceptable LOS. Additional improvements must be made to satisfy the City's LOS D threshold, including additional roadway connectivity such as the extension of International Drive to Sunrise Boulevard, extension of Kiefer Boulevard, and implementation of Rancho Cordova Parkway (and its connection to U.S. 50).

Improvements to this intersection are identified in the City's Circulation Element/Plan and included in the City's CIP. Implementation of the improvements identified above would assist in reducing traffic impacts on this intersection.

Implementation of Mitigation Measure 3.14-1j would reduce the significant impact on Intersection 15 to a **less-than-significant level** by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives.

IMPACT 3.14-1k

Unacceptable LOS at the Zinfandel Drive/U.S. 50 Eastbound Ramps Intersection (Intersection 16). *Signalized intersection operations at Zinfandel Drive/U.S. 50 eastbound ramps would degrade from an acceptable LOS E to an unacceptable LOS F during the a.m. peak traffic hour with project-related traffic from development Phase 1 and full project buildout. Although the intersection would operate at an unacceptable LOS F during the p.m. peak traffic hour both with and without project traffic, the V/C ratio at this intersection would increase by more than 0.05 with project traffic.*

Mitigation Measure 3.14-1k: Participate in Improvements to the Zinfandel Drive/U.S. 50 Eastbound Ramps Intersection (Intersection 16).

PP, HD, IM To ensure that the Zinfandel Drive/U.S. 50 eastbound ramps intersection operates at an acceptable LOS, all of the following improvements are required:

- The northbound approach must be reconfigured to consist of four through lanes and one shared through/right-turn lane.
- The eastbound approach must be reconfigured to consist of three left-turn lanes, one through lane, and one free right-turn lane.
- The westbound approach must be reconfigured to consist of three right-turn lanes.
- The southbound approach must be reconfigured to consist of three through lanes and a free right-turn lane.

Improvements to this intersection are identified in the City's CIP. Implementation of the improvements identified above would assist in reducing traffic impacts on the intersection. These improvements must be coordinated with Caltrans and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1k would reduce the significant impact on Intersection 16 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, these identified improvements fall under the jurisdiction of Caltrans. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1l

Unacceptable LOS at the Sunrise Boulevard/White Rock Road Intersection (Intersection 18). *The signalized intersection of Sunrise Boulevard/White Rock Road would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours both with and without project-related traffic, both under development Phase 1 and at full project buildout. However, the addition of project traffic would also increase the V/C ratio at the intersection by more than 0.05 during the a.m. and p.m. peak traffic hours.*

Mitigation Measure 3.14-1l: Participate in Improvements to the Sunrise Boulevard/White Rock Road Intersection (Intersection 18).

PP, HD, IM With two left-turn lanes, three through lanes, and one right-turn lane currently on all approaches, the Sunrise Boulevard/White Rock Road intersection would continue to operate at an unacceptable LOS as a result of sufficiently high volumes from traffic generated by the SunRidge Specific Plan and Rio del Oro Specific Plan. Therefore, to ensure that this intersection operates at an acceptable LOS, additional improvements must be made, such as grade separation of the intersection (consistent with the City's Circulation Element/Plan) and/or additional roadway facilities such as the Zinfandel Drive Extension, International Drive Extension into and through the Rio del Oro project site, and implementation of Rancho Cordova Parkway (and its connection to U.S. 50).

Improvements to this intersection and identified additional roadway connectivity are identified in the *Mather Field Specific Plan Public Facilities Financing Plan* (Zinfandel Drive Extension) or the City's CIP. Implementation of the improvements identified above would assist in reducing traffic impacts on this intersection. If these improvements are completed concurrent with development of the Mather Field Specific Plan or City's Public Facilities Financing Plan and implemented before development Phase 1 of Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1l would reduce the significant impact on Intersection 18 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, some of the identified improvements fall under the jurisdiction of Caltrans and the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1m Unacceptable LOS at the Sunrise Boulevard/Folsom Boulevard Intersection (Intersection 19). *Signalized intersection operations at Sunrise Boulevard/Folsom Boulevard would degrade from an acceptable LOS B during the a.m. peak traffic hour and LOS D during the p.m. peak traffic hour to an unacceptable LOS E and LOS F, respectively, with traffic from development Phase 1. The addition of project traffic under full buildout would cause a degradation to an unacceptable LOS F during both the a.m. and p.m. peak traffic hours.*

Mitigation Measure 3.14-1m: Participate in Improvements to the Sunrise Boulevard/Folsom Boulevard Intersection (Intersection 19).

PP, HD, IM Improvements must be made to ensure that the Sunrise Boulevard/Folsom Boulevard intersection operates at an acceptable LOS both with implementation of development Phase 1 and at buildout of the specific plan under any of the development alternatives. Specifically, to reduce impacts of development Phase 1, two left-turn lanes, four through lanes, and one right-turn lane should be added on the northbound and southbound approaches; and the westbound approach should be reconfigured to consist of two left-turn lanes, two through lanes, and two right-turn lanes. To reduce impacts associated with specific plan buildout, all of the following improvements should be made:

- Two left-turn lanes, four through lanes, and one right-turn lane should be added on the southbound approach.
- Two left-turn lanes, four through lanes, and one shared through/right-turn lane should be added on the northbound approach.
- Two left-turn lanes, two through lanes, and two right-turn lanes should be added on the westbound approach.

Implementing the improvements described above would provide acceptable operations at this intersection. However, doing so would require Sunrise Boulevard to expand to eight or more lanes, which is inconsistent with the City's Circulation Element/Plan because City policy requires roadway cross sections of six or fewer lanes.

An alternative to these improvements is to implement parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), Zinfandel Drive Extension, International Drive Extension into and through the Rio del Oro project site, and realignment of International Drive with Old Placerville Road (with associated roadway improvements). Implementing these alternative improvements would improve operations at and assist in reducing traffic impacts on this intersection.

Some of the improvements described above are identified in the *Mather Field Specific Plan Public Facilities Financing Plan* (Zinfandel Drive Extension) and the City's CIP. Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1m would reduce the significant impact on Intersection 19 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the intersection widening, which would require Sunrise Boulevard to be expanded to eight or more lanes, which is inconsistent with the City's Circulation Element/Plan. Additionally, some of the identified parallel capacity improvements fall under the jurisdiction of Caltrans and the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1n

Unacceptable LOS at the Sunrise Boulevard/U.S. 50 Westbound Ramps Intersection (Intersection 21). *The signalized intersection of Sunrise Boulevard/U.S. 50 westbound ramps would have sufficient capacity to serve expected demands during the a.m. and p.m. peak traffic hours without project-related traffic. With traffic at full project buildout, operations during the p.m. peak hour are expected to degrade to LOS E, an unacceptable level within the City of Rancho Cordova.*

Mitigation Measure 3.14-1n: Participate in Improvements to the Sunrise Boulevard/U.S. 50 Westbound Ramps Intersection (Intersection 21).

PP, HD, IM

Improvements must be made to ensure that the Sunrise Boulevard/U.S. 50 westbound ramps intersection operates at an acceptable LOS. Specifically, the westbound approach would need to consist of three left-turn lanes and two right-turn lanes.

Improvements to this interchange are identified in the City's CIP program.

An alternative to these improvements is to implement parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), Zinfandel Drive Extension, International Drive Extension into and through the Rio del Oro project site, and realignment of International Drive with Old Placerville Road (with associated roadway improvements). Implementing these alternative improvements would improve operations at and assist in reducing traffic impacts on this intersection.

Some of the improvements described above are identified in the *Mather Field Specific Plan Public Facilities Financing Plan* (Zinfandel Drive Extension) and the City's CIP. Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1n would reduce the significant impact on Intersection 21 to a less-than-significant level by improving intersection LOS under full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the City, as the lead agency, cannot guarantee implementation of this mitigation measure because the intersection is controlled by Caltrans. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans cooperates in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1o

Unacceptable LOS at the Sunrise Boulevard/Zinfandel Drive Intersection (Intersection 22). *The signalized intersection of Sunrise Boulevard/Zinfandel Drive would operate at LOS F during the a.m. and p.m. peak traffic hours with project traffic both under development Phase 1 and at full project buildout. However, the addition of project traffic would also increase the V/C ratio by 0.05 or more during the a.m. and p.m. peak traffic hours.*

Mitigation Measure 3.14-1o: Participate in Improvements to the Sunrise Boulevard/Zinfandel Drive Intersection (Intersection 22).

PP, HD, IM Improvements must be made to ensure that the Sunrise Boulevard/Zinfandel Drive intersection operates at an acceptable LOS. Specifically, all of the following improvements should be made:

- Two left-turn lanes, three through lanes, and one shared through/right-turn lane should be added on the northbound approach.
- One left-turn lane, four through lanes, and one right-turn lane (with treatment to increase capacity such as a receiving lane or pork-chop island) should be added on the southbound approach. (A pork-chop island is a triangular island placed adjacent to a free right-turn lane. It separates right-turning vehicles from through lanes and provides a refuge for pedestrians to cross the right-turn lane before crossing the through lanes.)
- One left-turn lane, one through lane, and one right-turn lane should be added on the eastbound approach.
- One left-turn lane and one shared through/right-turn lane should be added on the westbound approach.

These at-grade improvements are consistent with the County Mobility Study; however, they would be inconsistent with the City's Circulation Element/Plan, which identifies the segment as a six-lane facility.

An alternative to this set of improvements that is consistent with the City's Circulation Element/Plan is to implement grade separation at the intersection. Either improvement would increase capacity at this intersection and would assist in improving intersection operations.

Implementation of Mitigation Measure 3.14-1o would reduce the significant impact on Intersection 22 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the intersection widening, which would require Sunrise Boulevard to be expanded to eight lanes, is inconsistent with the City's Circulation Element/Plan. The alternative improvement, grade separation of the intersection, is consistent with the City's Circulation Element/Plan, but the required structure would likely have other significant impacts that have not been identified. Because one improvement is inconsistent with the City's Circulation Element/Plan and the other has potential environmental impacts that have not been evaluated adequately, this impact would remain **significant and unavoidable**.

IMPACT 3.14-1p

Unacceptable LOS at the Hazel Avenue/Folsom Boulevard Intersection (Intersection 23). *Signalized intersection operations at Hazel Avenue/Folsom Boulevard would degrade from an acceptable LOS D during the p.m. peak traffic hour to LOS E both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1p: Participate in Improvements to the Hazel Avenue/Folsom Boulevard Intersection (Intersection 23).

PP, HD, IM To ensure that the Hazel Avenue/Folsom Boulevard intersection operates at an acceptable LOS, the westbound approach must be reconfigured to consist of one left-turn lane, one through lane, and two right-turn lanes.

An alternative to this improvement that is consistent with the City's Circulation Element/Plan is to implement parallel capacity improvements, such as Easton Valley Parkway and upgrades to White Rock Road.

Implementation of Mitigation Measure 3.14-1p would reduce the significant impact on Intersection 23 to a less-than-significant level by improving intersection LOS under full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, most of the identified improvements fall under the jurisdiction of the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1q

Unacceptable LOS at the Hazel Avenue/U.S. 50 Eastbound Ramps Intersection (Intersection 24). *Signalized intersection operations at Hazel Avenue/U.S. 50 eastbound ramps would degrade from LOS E to LOS F during the p.m. peak traffic hour with project traffic both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1q: Participate in Improvements to the Hazel Avenue/U.S. 50 Eastbound Ramps Intersection (Intersection 24).

PP, HD, IM To ensure that the Hazel Avenue/U.S. 50 eastbound ramps intersection operates at an acceptable LOS, an additional eastbound left-turn lane must be installed, with an appropriate receiving lane. Improvements to this intersection must be coordinated with Caltrans and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1q would reduce the significant impact on Intersection 24 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, some of the identified improvements fall under the jurisdiction of Caltrans. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1r

Unacceptable LOS at the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Intersection 25). *Signalized intersection operations at Hazel Avenue/U.S. 50 westbound ramps would degrade from LOS D to LOS E during the p.m. peak traffic hour with the addition of project traffic, both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1r: Participate in Improvements to the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Intersection 25).

PP, HD, IM To ensure that the Hazel Avenue/U.S. 50 westbound ramps intersection operates at an acceptable LOS, an additional westbound right-turn lane must be installed on the off-ramp. Improvements to this intersection must be coordinated with Caltrans, the County, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1r would reduce the significant impact on Intersection 25 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, some of the identified improvements fall under the jurisdiction of Caltrans and the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1s

Unacceptable LOS at the Grant Line Road/White Rock Road Intersection (Intersection 26). *Unsignalized intersection operations at Grant Line Road/White Rock Road would degrade from an acceptable LOS C to an unacceptable LOS F during the a.m. peak traffic hour, and would continue to operate at LOS F during the p.m. peak traffic hour with the addition of project-related traffic, both under development Phase 1 and at full project buildout. The addition of project traffic during the p.m. peak traffic hour would increase control delay by more than 5.0 seconds.*

Mitigation Measure 3.14-1s: Participate in Improvements to the Grant Line Road/White Rock Road Intersection (Intersection 26).

PP, HD, IM To ensure that the Grant Line Road/White Rock Road intersection operates at an acceptable LOS, all of the following improvements are required:

- A traffic signal must be installed at this intersection.
- One through lane and one dedicated right-turn lane must be added on the southbound approach.

- One left-turn lane and one shared left/through/right-turn lane must be added on the eastbound approach.
- One left-turn lane and one through lane must be added on the northbound approach.

Improvements to this intersection must be coordinated with the County and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1p would reduce the significant impact on Intersection 26 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the identified improvements fall under the jurisdiction of the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1t

Unacceptable LOS at the Kilgore Road/White Rock Road Intersection (Intersection 27). *Signalized intersection operations at Kilgore Road/White Rock Road would degrade from LOS D to LOS F during the a.m. peak traffic hour with project traffic both under development Phase 1 and at full project buildout. Although this intersection would operate at an unacceptable LOS F during the p.m. peak traffic hour both with and without project traffic, project traffic would also increase the V/C ratio by 0.05 or more.*

Mitigation Measure 3.14-1t: Participate in Improvements to the Kilgore Road/White Rock Road Intersection (Intersection 27).

PP, HD, IM To ensure that the Kilgore Road/White Rock Road intersection operates at an acceptable LOS with implementation of development Phase 1, all of the following improvements are required:

- A free right-turn lane must be added on the northbound approach with an associated receiving lane (which would require widening of the White Rock Road crossing of the Folsom South Canal).
- One through lane must be added on the eastbound approach.
- Two left-turn lanes must be provided on the westbound approach.

For buildout of the specific plan under the three development alternatives, the improvements described above are required. In addition, one left-turn lane, two through lanes, and one right-turn lane must be added to the southbound approach. Alternatively, International Drive could be extended into and through the Rio del Oro project site if desired, to provide parallel capacity to White Rock Road (see discussion of the International Drive realignment under "Impact Analysis" above and in Impact 3.14-5 below).

Although these required improvements would offset impacts associated with the project under buildout of the specific plan, this intersection would not operate acceptably. For this intersection to operate acceptably under buildout of all three development alternatives, International Drive would have to be extended into and through the project site in conjunction with the identified improvements.

The crossing of the Folsom South Canal must be coordinated with the U.S. Bureau of Reclamation and appropriate oversight agencies.

Implementation of Mitigation Measure 3.14-1t would reduce the significant impact on Intersection 27 to a less-than-significant level by improving intersection LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. The identified extension of International Drive into and through the project site would require crossing the Folsom South Canal, which would involve other regulatory agencies. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of this improvement because of the necessary crossing of the Folsom South Canal. Thus, this impact would remain **significant and unavoidable**. If the U.S. Bureau of Reclamation cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1u

Unacceptable LOS on Mather Boulevard between Femoyer Street and Douglas Road (Roadway Segment 4). *This roadway segment would degrade from an acceptable LOS E to an unacceptable LOS F with project-related traffic both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1u: Participate in Improvements to Mather Boulevard between Femoyer Street and Douglas Road (Roadway Segment 4).

PP, HD, IM To ensure that Mather Boulevard operates at an acceptable LOS between Femoyer Street and Douglas Road, Femoyer Street must be widened to four lanes between Mather Boulevard and the proposed Zinfandel Drive extension, and the future Zinfandel Drive extension must be constructed as a four-lane facility from Femoyer Street to Douglas Road. Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1u would reduce the significant impact on Roadway Segment 4 to a less-than-significant level by improving LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the identified improvements fall under the jurisdiction of the County. Therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1v

Unacceptable LOS on Douglas Road between Mather Boulevard and Sunrise Boulevard (Roadway Segment 5). *This roadway segment would operate at an unacceptable LOS F both with and without project-related traffic both under development Phase 1 and at full project buildout. However, project traffic would increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-1v: Participate in Improvements to Douglas Road between Mather Boulevard and Sunrise Boulevard (Roadway Segment 5).

PP, HD, IM To ensure that Douglas Road operates at an acceptable LOS between Mather Boulevard and Sunrise Boulevard, Douglas Road must be widened to four lanes. Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1v would reduce the significant impact on Roadway Segment 5 to a less-than-significant level by improving LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, the identified improvements fall under the jurisdiction of the County and other regulatory agencies because of the Folsom South Canal crossing. Therefore, neither the City nor the project applicant(s) would have control over

their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1w

Unacceptable LOS on White Rock Road between Sunrise Boulevard and Grant Line Road (Roadway Segment 9). *This roadway segment would degrade from LOS A to an unacceptable LOS E with traffic from development Phase 1, and would degrade to an unacceptable LOS F with traffic at full project buildout.*

Mitigation Measure 3.14-1w: Participate in Improvements to White Rock Road between Sunrise Boulevard and Grant Line Road (Roadway Segment 9).

PP, HD, IM To ensure that White Rock Road operates at an acceptable LOS between Sunrise Boulevard and Grant Line Road, White Rock Road must be widened to four lanes. Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1w would reduce the significant impact on Roadway Segment 9 to a less-than-significant level by improving LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. Although the majority of the roadway segment is within Rancho Cordova, the eastern portion of the roadway segment falls under the jurisdiction of the County. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of this improvement. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1x

Unacceptable LOS on Zinfandel Drive between the U.S. 50 Eastbound Ramps and White Rock Road (Roadway Segment 15). *This roadway segment would degrade from LOS E to LOS F with project-related traffic both under development Phase 1 and at full project buildout, and the V/C ratio would increase by more than 0.05.*

Mitigation Measure 3.14-1x: Participate in Improvements to Zinfandel Drive between the U.S. 50 Eastbound Ramps and White Rock Road (Roadway Segment 15).

PP, HD, IM Improvements must be made to ensure that Zinfandel Drive operates at an acceptable LOS between the U.S. 50 eastbound ramps and White Rock Road; specifically, this roadway segment should be widened to eight lanes. This improvement would allow the segment to operate at an acceptable LOS; however, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

An alternative to this identified improvement is implementation of parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), extension of International Drive into and through the project site, and connectivity between International Drive and Old Placerville Road.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1x would reduce the significant impact on Roadway Segment 15 to a less-than-significant level by improving LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, widening the segment is inconsistent with the City's Circulation Element/Plan. Additionally, the alternative improvements, consisting of connecting International Drive between Bradshaw Road and the project site and implementation of Rancho Cordova Parkway (and its connection to U.S. 50), fall partially under the jurisdiction

of the County; therefore, neither the City nor the project applicant(s) can ensure their implementation. Given these conditions, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1y

Unacceptable LOS on Sunrise Boulevard between Gold Country Boulevard and Coloma Road (Roadway Segment 17). *This roadway segment would operate at an unacceptable LOS F both with and without project-related traffic, both under development Phase 1 and at full project buildout. However, the addition of project traffic would also cause the V/C ratio to increase by more than 0.05.*

Mitigation Measure 3.14-1y: Participate in Improvements to Sunrise Boulevard between Gold Country Boulevard and Coloma Road (Roadway Segment 17).

PP, HD, IM Improvements must be made to improve operations on Sunrise Boulevard between Gold Country Boulevard and Coloma Road; specifically, this roadway segment should be widened to eight lanes. This improvement would offset the impacts of the project, but the segment would continue to operate at an unacceptable LOS. Additionally, although this improvement is consistent with the County Mobility Study, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes. Furthermore, without additional river crossings, there are no parallel capacity improvements to relieve Sunrise Boulevard on this segment.

Implementation of Mitigation Measure 3.14-1y would partially reduce the significant impact on Roadway Segment 17 by offsetting impacts from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, implementation of this measure would not reduce the impact to a less-than-significant level, for the following reasons:

- This improvement is inconsistent with the City's Circulation Element/Plan.
- The potential for additional river crossings is limited. Any additional river crossings would require environmental review and would result in significant impacts on riparian vegetation. Additionally, implementing an additional river crossing would require acquisition of a significant number of existing homes, would have the potential to increase traffic volumes through residential neighborhoods, would require substantial funding, and would require cooperation of multiple agencies and jurisdictions. Additionally, neither the City nor the project applicant(s) would have control over mitigation implementation involving other jurisdictions (i.e., the County, Caltrans).
- The segment would continue to operate at an unacceptable LOS with the identified improvement.

For these reasons, the impact would remain **significant and unavoidable**.

IMPACT 3.14-1z

Unacceptable LOS on Sunrise Boulevard between Coloma Road and the U.S. 50 Westbound Ramps (Roadway Segment 18). *This roadway segment would operate at an unacceptable LOS F both with and without project-related traffic, both under development Phase 1 and at full project buildout. However, the addition of project traffic would also cause the V/C ratio to increase by more than 0.05.*

Mitigation Measure 3.14-1z: Participate in Improvements to Sunrise Boulevard between Coloma Road and the U.S. 50 Westbound Ramps (Roadway Segment 18).

PP, HD, IM Improvements must be made to improve operations on Sunrise Boulevard between Coloma Road and the U.S. 50 westbound ramps; specifically, this roadway segment should be widened to eight lanes. This improvement would offset the impacts of the project, but the segment would continue to operate at an unacceptable LOS. Additionally, although this improvement is consistent with the County Mobility Study, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes. Furthermore, without additional river crossings, there are no parallel capacity improvements to relieve Sunrise Boulevard on this segment.

Implementation of Mitigation Measure 3.14-1z would partially reduce the significant impact on Roadway Segment 18 by offsetting impacts from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, implementation of this measure would not reduce the impact to a less-than-significant level for the same reasons as identified for Impact 3.14-1y above. Therefore, this impact would remain **significant and unavoidable**.

IMPACT 3.14-1aa Unacceptable LOS on Sunrise Boulevard between the U.S. 50 Eastbound Ramps and Folsom Boulevard (Roadway Segment 19). *This roadway segment would operate at an unacceptable LOS F both with and without project-related traffic, both under development Phase 1 and at full project buildout. However, the addition of project traffic would also cause the V/C ratio to increase by more than 0.05.*

Mitigation Measure 3.14-1aa: Participate in Improvements to Sunrise Boulevard between the U.S. 50 Eastbound Ramps and Folsom Boulevard (Roadway Segment 19).

PP, HD, IM Improvements must be made to improve operations on Sunrise Boulevard between the U.S. 50 eastbound ramps and Folsom Boulevard; specifically, this roadway segment should be widened to eight lanes. This improvement would offset the impacts of the project, but the segment would continue to operate at an unacceptable LOS. Additionally, although this improvement is consistent with the County Mobility Study, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

An alternative to this identified improvement is implementation of parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), which could improve operations on this segment and reduce the project's impact.

Improvements to this roadway segment must be coordinated with Caltrans, Sacramento RT, and other potentially affected oversight agencies.

Implementation of Mitigation Measure 3.14-1aa would partially reduce the significant impact on Roadway Segment 19 by offsetting impacts from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, implementation of this measure would not reduce the impact to a less-than-significant level. The alternative improvement, implementation of Rancho Cordova Parkway (and its connection to U.S. 50), could further reduce volumes on this segment and would reduce the impact to a less-than-significant level.

The identified improvement is inconsistent with the City's Circulation Element/Plan, and implementation of Rancho Cordova Parkway (and its connection to U.S. 50) falls under the jurisdiction of the County and Caltrans; therefore, neither the City nor the project applicant(s) can guarantee implementation of either the identified improvement or its alternative. Thus, this impact would remain **significant and unavoidable**. If Caltrans, Sacramento RT, the County, and other potentially affected agencies cooperate in allowing the improvements to

move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1bb

Unacceptable LOS on Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20). *This roadway segment would degrade from an unacceptable LOS E to LOS F, and the V/C ratio would increase by more than 0.05, with project-related traffic both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1bb: Participate in Improvements to Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20).

PP, HD, IM

Improvements must be made to improve operations on Sunrise Boulevard between Folsom Boulevard and White Rock Road; specifically, this roadway segment should be widened to eight lanes. This improvement would offset the impacts of the project, but the segment would continue to operate at an unacceptable LOS. Additionally, this improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

An alternative to this identified improvement is implementation of parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), which could improve operations on this segment and reduce the project's impact.

Improvements to this roadway segment must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-1bb would partially reduce the significant impact on Roadway Segment 20 by offsetting impacts from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, implementation of this measure would not reduce the impact to a less-than-significant level. The alternative improvement, implementation of Rancho Cordova Parkway (and its connection to U.S. 50), could further reduce volumes on this segment to a less-than-significant level.

The identified improvement is inconsistent with the City's Circulation Element/Plan, and implementation of Rancho Cordova Parkway falls under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) can guarantee implementation of either the identified improvement or its alternative. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1cc

Unacceptable LOS on Sunrise Boulevard between White Rock Road and Douglas Road (Roadway Segment 21). *This roadway segment would degrade from an acceptable LOS B to an unacceptable LOS F with project traffic both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1cc: Participate in Improvements to Sunrise Boulevard between White Rock Road and Douglas Road (Roadway Segment 21).

PP, HD, IM

Improvements must be made to ensure that Sunrise Boulevard operates at an acceptable LOS between White Rock Road and Douglas Road; specifically, this roadway segment should be widened to eight lanes. With this improvement, this segment would operate at an acceptable LOS for the Baseline Plus Phase 1 and Baseline Plus Full Project Buildout scenarios under all three development alternatives. However, this improvement is inconsistent with the City's Circulation Element/Plan.

An alternative to this identified improvement is implementation of parallel capacity improvements, such as implementation of Rancho Cordova Parkway (and its connection to U.S. 50), which could improve operations on this segment and reduce the project's impact.

Improvements to this intersection must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-1cc would reduce the significant impact on Roadway Segment 21 to a less-than-significant level by improving LOS under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. The alternative improvement, implementation of Rancho Cordova Parkway (and its connection to U.S. 50), could further reduce volumes on this segment.

The identified improvement is inconsistent with the City's Circulation Element/Plan because City policy requires roadway cross sections to be a maximum of six lanes, and implementation of Rancho Cordova Parkway falls under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) can guarantee implementation of either the identified improvement or its alternative. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1dd

Unacceptable LOS at Sunrise Boulevard between SR 16 and Grant Line Road (Roadway Segment 22). *This roadway segment would degrade from an acceptable LOS D to an unacceptable LOS F with project-related traffic both under development Phase 1 and at full project buildout.*

Mitigation Measure 3.14-1dd: Participate in Improvements to Sunrise Boulevard between SR 16 and Grant Line Road (Roadway Segment 22).

PP, HD, IM To ensure that Sunrise Boulevard operates at an acceptable LOS between SR 16 and Grant Line Road, this roadway segment must be widened to four lanes. This improvement is included within the County's development fee program. If this improvement is implemented before development Phase 1 of the Rio del Oro project, then the project impact at this intersection would be reduced to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1dd would reduce the significant impact on Roadway Segment 22 to a less-than-significant level by providing acceptable operations under development Phase 1 (Proposed Project Alternative) and at full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, because the improvement falls under the jurisdiction of the County, neither the City nor the project applicant(s) can guarantee its implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1ee

Unacceptable LOS at Hazel Avenue between Winding Way and the U.S. 50 Westbound Ramps (Roadway Segment 23). *This roadway segment would operate at an unacceptable LOS F both with and without project-related traffic, both under development Phase 1 and at full project buildout. The addition of project traffic would exacerbate these unacceptable operations. Project traffic would also increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-1ee: Participate in Improvements to Hazel Avenue between Winding Way and the U.S. 50 Westbound Ramps (Roadway Segment 23).

PP, HD, IM To improve operations on Hazel Avenue between Winding Way and the U.S. 50 westbound ramps, this roadway segment must be widened to six lanes. This improvement is included within the County's development fee program and is expected to receive Measure A funding.

With the identified improvement, this segment would still operate at an unacceptable LOS for the Baseline Plus Phase 1 and Baseline Plus Full Project Buildout scenarios under all three development alternatives, but the improvement would offset the amount of traffic the project adds to the segment and would reduce the project impact to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-1ee would reduce the significant impact on Roadway Segment 23 to a less-than-significant level by offsetting impacts from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives. However, because this improvement falls under the jurisdiction of the County, neither the City nor the project applicant(s) can guarantee its implementation. Thus, the impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1ff

Unacceptable LOS at U.S. 50 between Mather Field Road and Zinfandel Drive (Freeway Segment 27), and between Sunrise Boulevard and Hazel Avenue (Freeway Segment 29). *These freeway segments would operate at an unacceptable LOS F both with and without project-related traffic, both under development Phase 1 and at full project buildout. The addition of project traffic would exacerbate these unacceptable operations.*

Mitigation Measure 3.14-1ff: Participate in Improvements to U.S. 50 between Mather Field Road and Zinfandel Drive (Freeway Segment 27) and U.S. 50 between Sunrise Boulevard and Hazel Avenue (Freeway Segment 29).

PP, HD, IM To ensure that U.S. 50 operates at an acceptable LOS between Mather Field Road and Zinfandel Drive and between Sunrise Boulevard and Hazel Avenue, the following improvements to the U.S. 50 corridor are required:

- Ramp metering must be added on the Mather Field Road and Zinfandel Drive eastbound on-ramps.
- An auxiliary lane must be constructed from Mather Field Road and Sunrise Boulevard.
- Traffic-signal timing at freeway interchanges must be coordinated with adjacent City intersections to minimize impacts of vehicle queue spillback onto U.S. 50.
- Parallel facilities to U.S. 50 must be constructed, including improvements to SR 16, extension of International Drive into and through the project site, extension of Kiefer Boulevard, construction of Easton Valley Parkway, and connectivity of International Drive to Old Placerville Road.
- HOV lanes must be extended from Sunrise Boulevard to downtown Sacramento (or, as an interim project, to Watt Avenue).

- HOV enhancements to existing interchanges must be provided, such as bypass lanes at existing metered on-ramps.

Improvements to these freeway segments must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-1ff would reduce the significant impacts on Freeway Segments 27 and 29 to a less-than-significant level under the Proposed Project, Impact Minimization, and High Density Alternatives under development Phase 1 and at full project buildout.

The City's CIP has identified some of the improvements identified above. Caltrans is conducting the U.S. 50 HOV Lane Project Plus Community Enhancement Project, which will evaluate the extension of eastbound and westbound HOV lanes on U.S. 50 to downtown Sacramento.

Several of the identified improvements fall under the jurisdiction of Caltrans or the County; therefore, neither the City nor the project applicant(s) can guarantee their implementation. Given these conditions, this impact remains **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-1gg

Unacceptable LOS at Douglas Road between Sunrise Boulevard and Jaeger Road (Roadway Segment 31). *This roadway segment would operate at an acceptable LOS A without the project and unacceptable LOS E with project-related traffic at full project buildout under the High Density Alternative.*

Mitigation Measure 3.14-1gg: Participate in Improvements to Douglas Road between Sunrise Boulevard and Jaeger Road (Roadway Segment 31).

HD

To improve operations on Douglas Road between Sunrise Boulevard and Jaeger Road, this roadway segment must be widened to six lanes consistent with the City's Circulation Element/ Plan.

This improvement is included within the *SunRidge Specific Plan Public Facilities Financing Plan* and zoning conditions as well as the City's CIP.

Implementation of Mitigation Measure 3.14-1gg would reduce the significant impact on Roadway Segment 23 to a **less-than-significant** level by providing acceptable operations under the High Density Alternative.

IMPACT 3.14-1hh

Unacceptable LOS at Sunrise Boulevard between Douglas Road and Kiefer Boulevard (Roadway Segment 33). *This roadway segment would degrade from an acceptable LOS B to an unacceptable LOS E with project-related traffic under development Phase 1. Project-related traffic at full project buildout would cause the intersection to degrade to an unacceptable LOS F.*

Mitigation Measure 3.14-1hh: Participate in Improvements to Sunrise Boulevard between Douglas Road and Kiefer Boulevard (Roadway Segment 33).

PP, HD, IM

To ensure that Sunrise Boulevard operates at an acceptable LOS between Douglas Road and Kiefer Boulevard, this roadway segment must be widened to six lanes consistent with the City's Circulation Element/Plan and CIP.

Implementation of Mitigation Measure 3.14-1hh would reduce the significant impact on Roadway Segment 33 to a **less-than-significant** level by providing acceptable operating levels with traffic from development Phase 1 (Proposed Project Alternative) and from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives.

IMPACT 3.14-1ii

Unacceptable LOS at Sunrise Boulevard between Kiefer Boulevard and SR 16 (Roadway Segment 34). *This roadway segment would degrade from an acceptable LOS B to an unacceptable LOS E with project-related traffic under full project buildout.*

Mitigation Measure 3.14-1ii: Participate in Improvements to Sunrise Boulevard between Kiefer Boulevard and SR 16 (Roadway Segment 34).

PP, HD, IM To ensure that Sunrise Boulevard operates at an acceptable LOS between Kiefer Boulevard and SR 16, this roadway segment must be widened to six lanes consistent with the City's Circulation Element/Plan and CIP.

Implementation of Mitigation Measure 3.14-1ii would reduce the significant impact on Roadway Segment 34 to a **less-than-significant** level by providing acceptable operating levels with traffic from full project buildout under the Proposed Project, High Density, and Impact Minimization Alternatives.

IMPACT 3.14-1jj

Unacceptable LOS at Various Merge and Diverge Segments of U.S. 50. *With the exception of the Mather Field Road loop on-ramp, merge, the following merge and diverge segments of U.S. 50 would operate at an unacceptable LOS F with and without project-related traffic under development Phase 1:*

- Eastbound U.S. 50
  - Mather Field Road direct off-ramp, diverge
  - Sunrise Boulevard direct off-ramp, diverge
  - Sunrise Boulevard loop/direct on-ramp, merge
- Westbound U.S. 50
  - Hazel Avenue direct off-ramp, diverge
  - Zinfandel Drive direct on-ramp, merge
  - Mather Field Road loop on-ramp, merge (would degrade from LOS D to LOS F)
  - Mather Field Road direct on-ramp, merge

The addition of project-related traffic at full buildout would cause the following level of operations at U.S. 50 merge and diverge segments:

- Eastbound U.S. 50
  - Mather Field Road direct off-ramp, diverge—LOS F with and without project traffic, both a.m. and p.m. peak traffic hours
  - Zinfandel Drive direct off-ramp, diverge—would degrade from LOS C to LOS F in the a.m. peak traffic hour under the Proposed Project and Impact Minimization Alternatives; would degrade from LOS C to LOS F in the a.m. and LOS B to LOS F in the p.m. peak traffic hour under the High Density Alternative
  - Sunrise Boulevard direct off-ramp, diverge—LOS F with and without project traffic during the p.m. peak traffic hour
  - Sunrise Boulevard loop/direct on-ramp, merge—would degrade from LOS E to LOS F with project traffic during the p.m. peak traffic hour

- Westbound U.S. 50
  - Hazel Avenue direct off-ramp, diverge—LOS F with and without project traffic during the a.m. peak traffic hour
  - Zinfandel Drive direct on-ramp, merge—LOS F with and without project traffic during both a.m. and p.m. peak traffic hours
  - Mather Field Road direct off-ramp, diverge—would degrade from LOS E to LOS F in both the a.m. and p.m. peak traffic hours under the Proposed Project Alternative; would degrade from LOS E to LOS F in the a.m. peak traffic hour under the High Density and Impact Minimization Alternatives
  - Mather Field Road loop on-ramp, merge—would degrade from LOS D to LOS F in the p.m. peak traffic hour with project traffic under all three development alternatives
  - Mather Field Road direct on-ramp, merge—would operate at LOS F in the a.m. and p.m. peak traffic hours with and without project traffic

Mitigation Measure 3.14-1jj: Participate in Improvements to Various Merge and Diverge Segments of U.S. 50.

PP, HD, IM To ensure that the U.S. 50 merge and diverge areas operate at an acceptable LOS, the following improvements to the U.S. 50 corridor are required:

- Ramp metering must be added on the Mather Field Road and Zinfandel Drive eastbound on-ramps.
- An auxiliary lane must be constructed from Mather Field Road and Sunrise Boulevard.
- Traffic-signal timing at freeway interchanges must be coordinated with adjacent City intersections to minimize impacts of vehicle queue spillback onto U.S. 50.
- Parallel facilities to U.S. 50 must be constructed, including improvements to SR 16, extension of International Drive into and through the project site, extension of Kiefer Boulevard, construction of Easton Valley Parkway, and connectivity of International Drive to Old Placerville Road.
- HOV lanes must be extended from Sunrise Boulevard to downtown Sacramento (or, as an interim project, to Watt Avenue).
- HOV enhancements to existing interchanges must be provided, such as bypass lanes at existing metered on-ramps.

Improvements to these merge and diverge segments of U.S. 50 must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-1jj would reduce the significant impacts on U.S. 50 freeway merge/diverge/weave areas to a less-than-significant level under the Proposed Project, High Density, and Impact Minimization Alternatives under development Phase 1 and at full project buildout.

The City's CIP has identified some of the improvements identified above. Caltrans is conducting the U.S. 50 HOV Lane Project Plus Community Enhancement Project, which will evaluate the extension of eastbound and westbound HOV lanes on U.S. 50 to downtown Sacramento.

Several of the identified improvements fall under the jurisdiction of Caltrans or the County; therefore, neither the City nor the project applicant(s) can ensure that these improvements would be completed. Given these conditions, this impact remains **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-2

Increased Demand for Single-Occupant Automobile Travel in the Project Area. *Project implementation would increase demand for single-occupant automobile travel on area roadways and intersections.*

PP, HD, IM

The project would add significant traffic to area roadways and intersections, increasing the demand for single-occupant automobile travel on area roadways and intersections under all three development alternatives. This increase is considered a **significant, direct** impact. **No indirect** impacts would occur.

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would have no impact on the surrounding roadway system.

Because no new development would occur under the No Project Alternative, no traffic would be generated and associated demand on area roadways would not result; thus**, no direct** or **indirect** impacts would occur.

Mitigation Measure 3.14-2: Develop Commercial Support Services and Mixed-use Development Concurrent with Housing Development, and Develop and Provide Options for Alternative Transportation Modes.

PP, HD, IM

The project applicant(s) for all project phases shall develop commercial and mixed-use development concurrent with housing development, to the extent feasible in light of market realities and other considerations, to internalize vehicle trips. Pedestrian and bicycle facilities shall be implemented to the satisfaction of the City Public Works Department. To further minimize impacts from the increased demand on area roadways and intersections, the project applicant(s) for all project phases shall develop and implement safe and secure bicycle parking at schools and commercial centers to promote alternative transportation uses and reduce the volume of single-occupancy vehicles using area roadways and intersections.

Timing: Before approval of improvement plans for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

NP

No mitigation measures are required.

Implementation of Mitigation Measure 3.14-2 would reduce the demand of the single-occupant vehicle on area roadways and intersections under the Proposed Action, High Density, and Impact Minimization Alternatives. Although the mitigation measure has the potential to substantially reduce the number of single-occupant vehicles, the project would continue to add single-occupant vehicles in the area and the impact would remain **significant and unavoidable**.

IMPACT 3.14-3

Increased Demand for Alternative Modes of Transportation. *Implementation of the project would create demand for alternative transportation mode facilities such as buses, LRT, and carpools in Rancho Cordova.*

PP, HD, IM

The project includes a mix of residential densities, commercial uses, and pedestrian and bicycle facilities to promote options for movement beyond the use of motor vehicles. No LRT facilities are proposed as part of the specific plan. The project would create demand for alternative modes of transportation such as buses, LRT, and carpools in Rancho Cordova. This increased demand for alternative transportation modes is considered a **potentially significant**, **direct** impact. **No indirect** impacts would occur.

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. Mining activities would have limited impact on alternative modes of travel.

Because no project-related development would occur under the No Project Alternative, there would be no project-related demand on alternative modes of transportation; thus**, no direct** or **indirect** impacts would occur.

Mitigation Measure 3.14-3a: Participate in Capital Improvements for Transit Service.

PP, HD, IM

The project applicant(s) for all project phases shall participate in capital improvements for transit service. The project's fair-share participation and the associated timing of the improvements shall be identified in the project conditions of approval and/or the project's development agreement. Improvements shall be coordinated, as necessary, with Sacramento RT.

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Mitigation Measure 3.14-3b: Coordinate with the 50 Corridor Transportation Management Association and Comply with the City of Rancho Cordova Transportation System Management Ordinance.

PP, HD, IM

The project applicant(s) for all project phases shall coordinate with the 50 Corridor Transportation Management Association and comply with the City of Rancho Cordova transportation system management ordinance.

Timing: Concurrent with construction for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

NP

No mitigation measures are required.

Implementation of Mitigation Measures 3.14-3a and 3.14-3b would promote usage of alternative transportation modes and increase the supply of these modes. However, because neither the City nor the project applicant(s) can guarantee implementation of increased transit service within Rancho Cordova, the impact would remain **significant and unavoidable** under the Proposed Action, High Density, and Impact Minimization Alternatives. If Sacramento RT cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-4

Inconsistency of the Rio del Oro Specific Plan with the City's Adopted General Plan. *The proposed project is inconsistent with the City's adopted General Plan.*

PP, HD, IM

Rio del Oro Parkway and Villagio Parkway within the proposed specific plan area are shown, east of Rancho Cordova Parkway, as two-lane facilities. The City's adopted General Plan has identified these as four-lane facilities. Additionally, the proposed specific plan does not reflect the identified alignment of International Drive through the Rio del Oro project site. These inconsistencies are considered a **potentially significant**, **direct** impact. **No indirect** impacts would occur.

Rio del Oro Parkway and Villagio Parkway require four lanes only if connectivity though the Aerojet site occurs, as identified in the City's General Plan as occurring after Year 2030. Without this connectivity, two-lane facilities will suffice.

As part of the City's General Plan EIR, an analysis was conducted to identify impacts with various alignments of International Drive. The resulting shift in traffic volumes was summarized in a letter to the City dated June 19, 2006 (see Appendix J). The letter shows that the shift in volumes associated with the various alignments of International Drive would be minimal and that the shift in traffic volume is not projected to cause any new significant impacts.

Mitigation Measure 3.14-4: Modify Rio del Oro Specific Plan to be Consistent with the City's Adopted General Plan.

PP, HD, IM

The project applicant(s) for all project phases shall modify the Rio del Oro Specific Plan to be consistent with the City's General Plan.

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Implementation of Mitigation Measure 3.14-4 would make the Rio del Oro Specific Plan consistent with the City's adopted General plan and would reduce the impact to a **less-than-significant** level.

IMPACT 3.14-5

Potential Impacts Associated with Alternative Land Uses within the Overflight Zone of the Rio del Oro Specific Plan Area. *Land uses in the overflight zone were assumed to be industrial in nature. However, project implementation could result in alternative uses in this area, such as a sports field complex or amphitheater, which may create traffic impacts at greater intensities than the assumed industrial land uses.*

PP, HD, IM

Implementation of the project could result in designation of alternative land uses (i.e., sports field complex or amphitheatre) within the overflight zone. These land uses are inconsistent with land uses assumed in this evaluation. These land uses, may generate traffic at greater intensities than the assumed industrial land uses. This is considered a **potentially significant**, **direct** impact. **No indirect** impacts would occur.

Mitigation Measure 3.14-5: Require Individual Transportation Impact Studies for Alternative Land Uses in the Overflight Zone and Implement All Identified Transportation Improvements.

PP, HD, IM

As development occurs in the overflight zone, the project applicant(s) for any proposed alternative land use shall complete specific transportation impact studies to the satisfaction of the City's Public Works Department. Impacts shall be identified using methodologies adopted by the City or consistent with those identified in this DEIR/DEIS. Improvements identified as a result of the individual transportation impact studies shall be implemented by the project applicant(s) for

all project phases.

Timing: As development applications come forth for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Implementation of Mitigation Measure 3.14-5 would require specific alternative development proposals within the overflight zone to be analyzed at a project-specific level and significant impacts to be identified with implementation of this development. Because the City does not yet have sufficient information to assess the project-specific transportation-related impacts of any alternative development scenarios, the City at present lacks information sufficient to determine whether implementation of this mitigation measure would reduce impacts to alternative land uses within the over-flight zone to a less-than-significant level. For this reason, the impact is considered **potentially significant and unavoidable**.

Cumulative Impacts and Mitigation Measures

This section addresses impacts of the project under cumulative (2030) conditions. Impacts are identified when the project's incremental contribution is "cumulatively considerable" and thus is considered significant.

Cumulative effects that would occur under each alternative development scenario are identified as follows: PP (Proposed Project), HD (High Density), IM (Impact Minimization), and NP (No Project). Note that all cumulative impacts of the High Density and Impact Minimization Alternatives would be similar to those of the Proposed Project Alternative, while those of the No Project Alternative would be less severe than those of the Proposed Project Alternative because significantly less development would occur. Note that all cumulative impacts of the NF Alternative (No Federal Action) would be inconsistent with the City General Plan Circulation Element/Plan. This alternative would result in greater impacts on transportation infrastructure outside the Rio del Oro Specific Plan area. No feasible mitigation measures are available to reduce impacts resulting from implementation of the NF Alternative to a less than significant level. Therefore, impacts under the NF Alternative would remain **significant and unavoidable**.

IMPACT 3.14-6

Potential Impacts Associated with the City's Transportation Impact Fee Program. *The City of Rancho Cordova has a transportation impact fee program to implement roadway facilities (those identified in the City General Plan for implementation before Year 2030) within the city limits. However, currently this program is only 67% funded.*

PP, HD, IM, NP

The City's fee transportation impact fee program is not currently fully funded. Therefore, cumulative impacts identified below need additional funding (beyond the fee program) to mitigate the impacts until the fee program is fully funded. This is considered a **potentially significant**, **direct** impact.

Mitigation Measure 3.14-6: Pay Fair-Share Cost of Identified Improvements that Are Not Fully Funded by the City's Fee Program.

PP, HD, IM, NP

The project applicant(s) for all project phases shall provide fair-share contributions to the City's transportation impact fee program to aid in bridging the program's funding shortfall. However, ultimate funding of the improvements cannot be guaranteed (as it would require funding from other developments in the area).

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Implementation of Mitigation Measure 3.14-6 requires project applicant(s) to make fair-share contributions toward bridging the funding shortfall from the City's fee program. However, because ultimate funding of the improvements cannot be guaranteed and the City cannot guarantee implementation of the identified measures, the impact would remain **significant and unavoidable.** If the City is able to ultimately fully fund the fee program through fair-share contributions or external funding sources, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7

Increases to Peak-Hour and Daily Traffic Volumes, Resulting in Unacceptable Levels of Service, under Cumulative (2030) Conditions. *Implementation of the project and other reasonably foreseeable development would cause an increase in a.m. peak traffic hour, p.m. peak traffic hour, and/or daily traffic volumes on area roadways, resulting in unacceptable LOS and warranting the need for improvements such as traffic signals and additional lanes under cumulative (2030) conditions.*

PP, HD, IM

Under all traffic-analysis scenarios that assume full project buildout under cumulative (2030) conditions (i.e., the Cumulative Plus Full Buildout scenario), project-related traffic under the Proposed Project, High Density, and Impact Minimization Alternatives would affect LOS at study-area intersections. Exhibits 3.14-12 and 3.14-13 present peak-hour traffic volumes, lane configurations, and traffic control under Cumulative No Project and Cumulative Plus Full Buildout conditions, respectively. Exhibit 3.14-14 compares ADT volumes under Cumulative No Project conditions with those under Cumulative Plus Full Buildout conditions. As shown in these exhibits, project implementation would cause an increase in a.m. peak-hour, p.m. peak-hour, and/or daily traffic volumes at study area intersections, roadway segments, and freeway ramps. Impacts associated with this increased traffic were compared against the thresholds of significance identified previously. For the sake of brevity, only intersections, roadways, and freeway ramps where direct, significant impacts would occur are discussed below, followed by required mitigation measures. There would be no indirect impacts in this context. Tables 3.14-13, 3.14-14, and 3.14-15 show intersections, roadway segments, and freeway ramps that would be affected by project implementation.

NP

Under the No Project Alternative, mining activities at the project site, which are not part of the Rio del Oro project, would continue under existing Conditional Use Permits—one originally issued by the County, and the other issued by the City—and possibly under one or more future individual Implementation Permits expected to be issued by the City. These activities would not generate traffic that would affect the regional transportation system.

Because no project-related development would occur under the No Project Alternative, there would be no project-generated traffic that would affect the regional transportation system; thus, no direct or indirect impacts would occur.

Mitigation Measure Common to All Impacts under Impact 3.14-7

To avoid repetition, the information contained in the following mitigation measure applies to all other mitigation measures required under Impact 3.14-7. Note that no mitigation measures are required for the No Project Alternative because, as described above, no direct or indirect impacts would occur.

PP, HD, IM

The project applicant(s) for all project phases shall participate in the necessary improvements identified in all of the following mitigation measures. The project's fair-share participation and the associated timing of the improvements shall be identified in the project conditions of approval and in the mitigation monitoring and reporting program for the project or in conjunction with and as an appendix to the Rio del Oro Specific Plan (see mitigation measures following each identified impact).

The timing and enforcement (described below) would be the same for all identified mitigation measures associated with Impact 3.14-7.

Timing: As a condition of project approval and/or as a condition of the development agreement for all project phases.

Enforcement: City of Rancho Cordova Public Works Department.

Please note that the improvements described in each of the following mitigation measures have not been designed, and therefore, project-specific impacts as a result of these improvements cannot be precisely identified or quantified.

If need be, site-specific impacts of the identified improvements would be assessed pursuant to CEQA requirements when specific intersection and roadway improvement plans are developed, separate from the Rio del Oro DEIR/DEIS. Any such necessary environmental review would be completed before final approval of the improvements identified in the mitigation measures. No such additional review may be necessary, however, if the effects of such improvements are consistent with what can generally be expected of such improvements, as set forth immediately below.

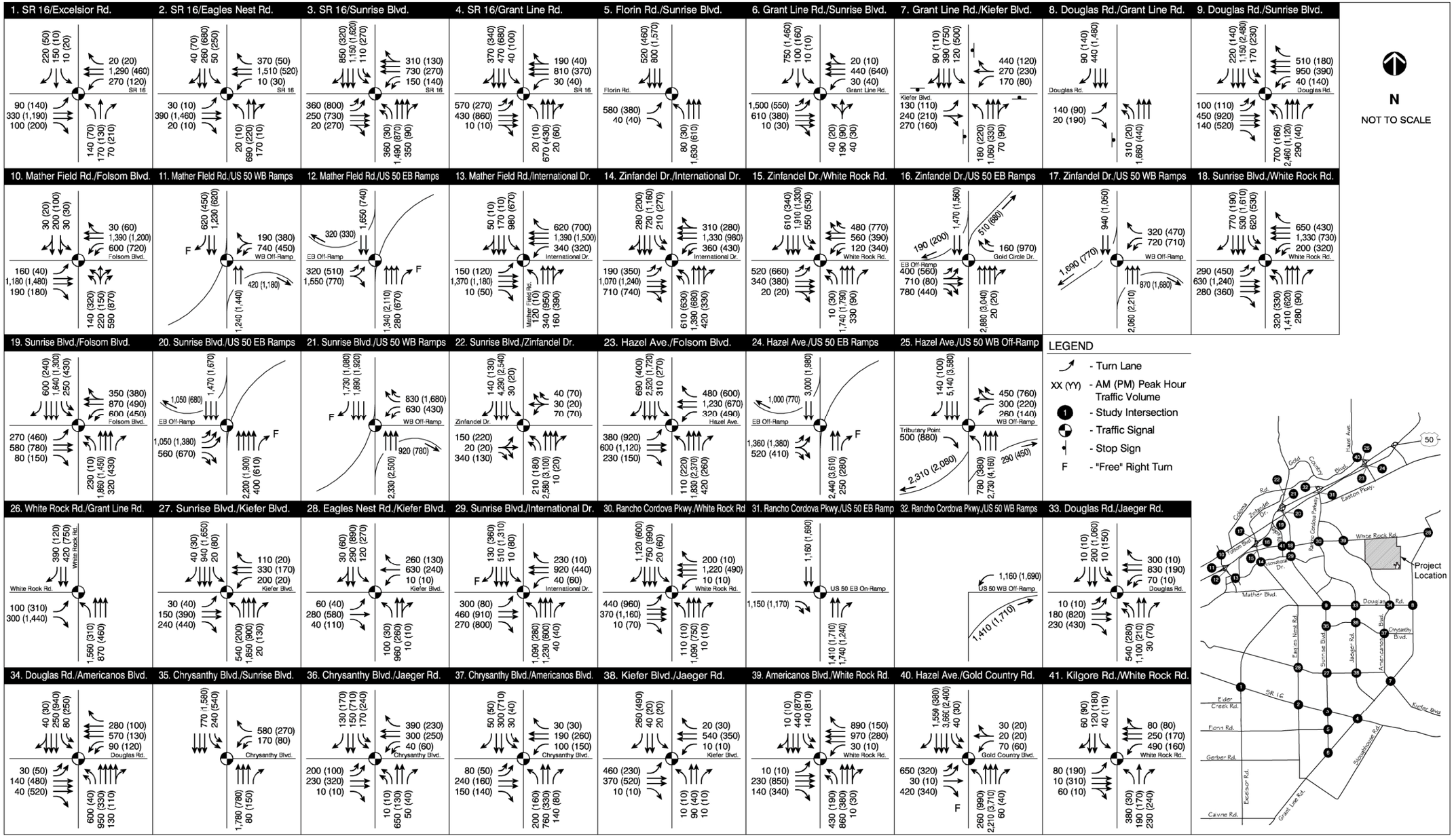
Based on review of existing available environmental documentation, field review at a reconnaissance level, and review of aerial photography, it is anticipated that, at worst, the construction of these intersection and roadway improvements could directly adversely affect wetland resources and associated grassland habitat area and could result in construction-related environmental effects, including but not limited to:

- impacts related to construction traffic, noise, air quality, water quality, and drainage;
- impacts on cultural resources; and
- impacts on special-status plants and animals and their habitats.

In addition to construction-related impacts, implementation of these improvements could result in long-term effects on water quality and drainage. The impacts that could arise from the planned improvements will be measured using the significance thresholds identified in each section of Chapter 3 of this DEIR/DEIS.

Once a planned roadway is designed, the City will retain a qualified biologist to conduct a reconnaissance survey to determine type(s) of habitat to be removed, and whether wetlands or special-status species are present. The City will also conduct a cultural resources records search to determine whether any known cultural resources are present.

The mitigation measures recommended in Chapter 3 of this DEIR/DEIS would be applied (where applicable) to mitigate any such effects, if significant, to less-than-significant levels. For example, measures will be implemented to ensure no net loss of wetlands. Best management practices and Sacramento Metropolitan Air Quality Management District measures will be implemented for water and air quality effects, and preconstruction surveys would be performed where sensitive habitat is present (and if special-status species or habitat is present, the biological resources protection measures would be implemented). The relocation of any utility pole or other utilities will be coordinated with the appropriate service provider to ensure that there would be no impact on the service provider. Additionally, if permits or other authorization are required, they will be secured and the conditions will be followed.

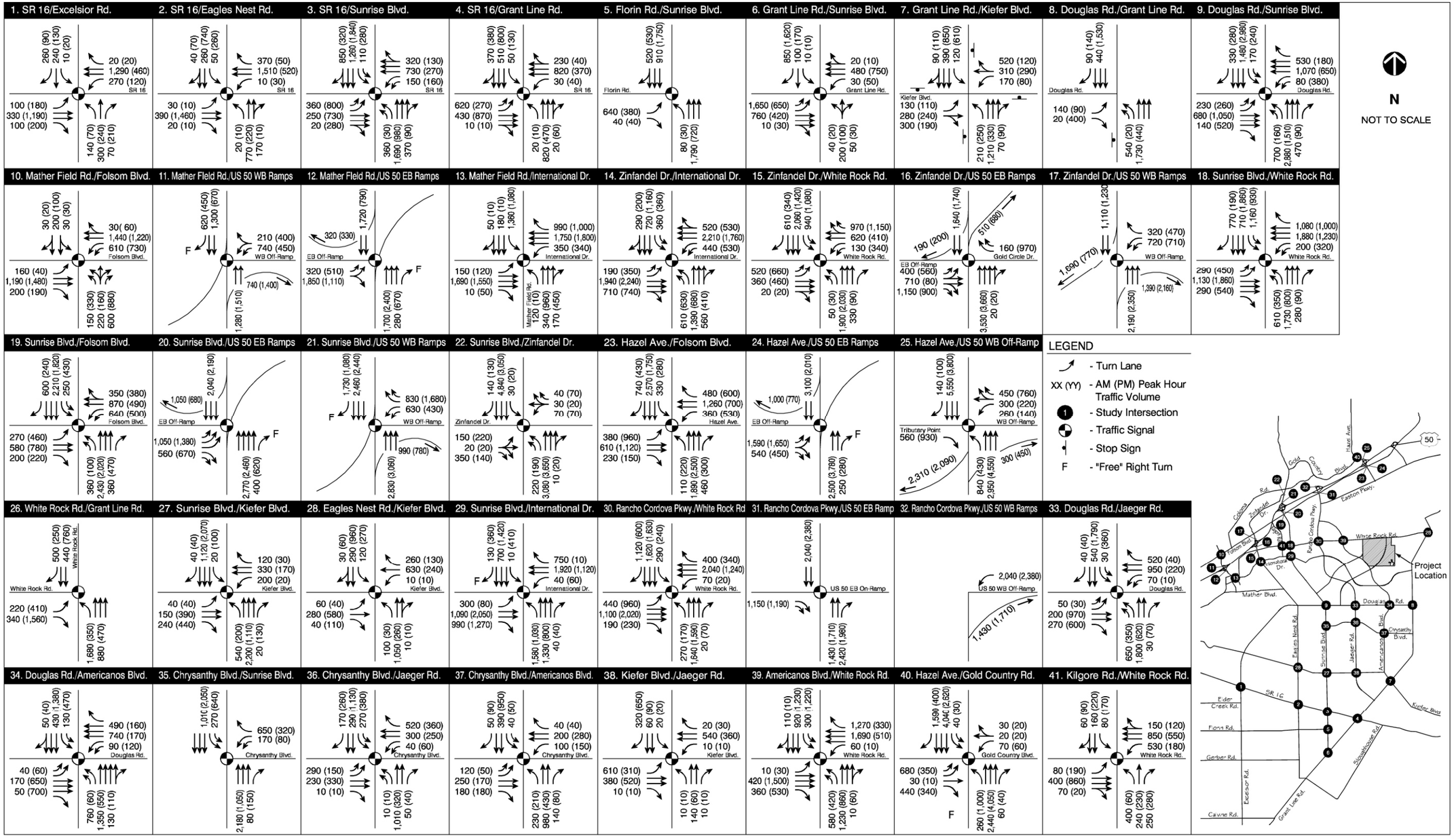


G 03110089.01 008

Source: Fehr & Peers 2006

Peak Hour Traffic Volumes, Lane Configurations, and Traffic Control-Cumulative No Project Conditions

EXHIBIT 3.14-12



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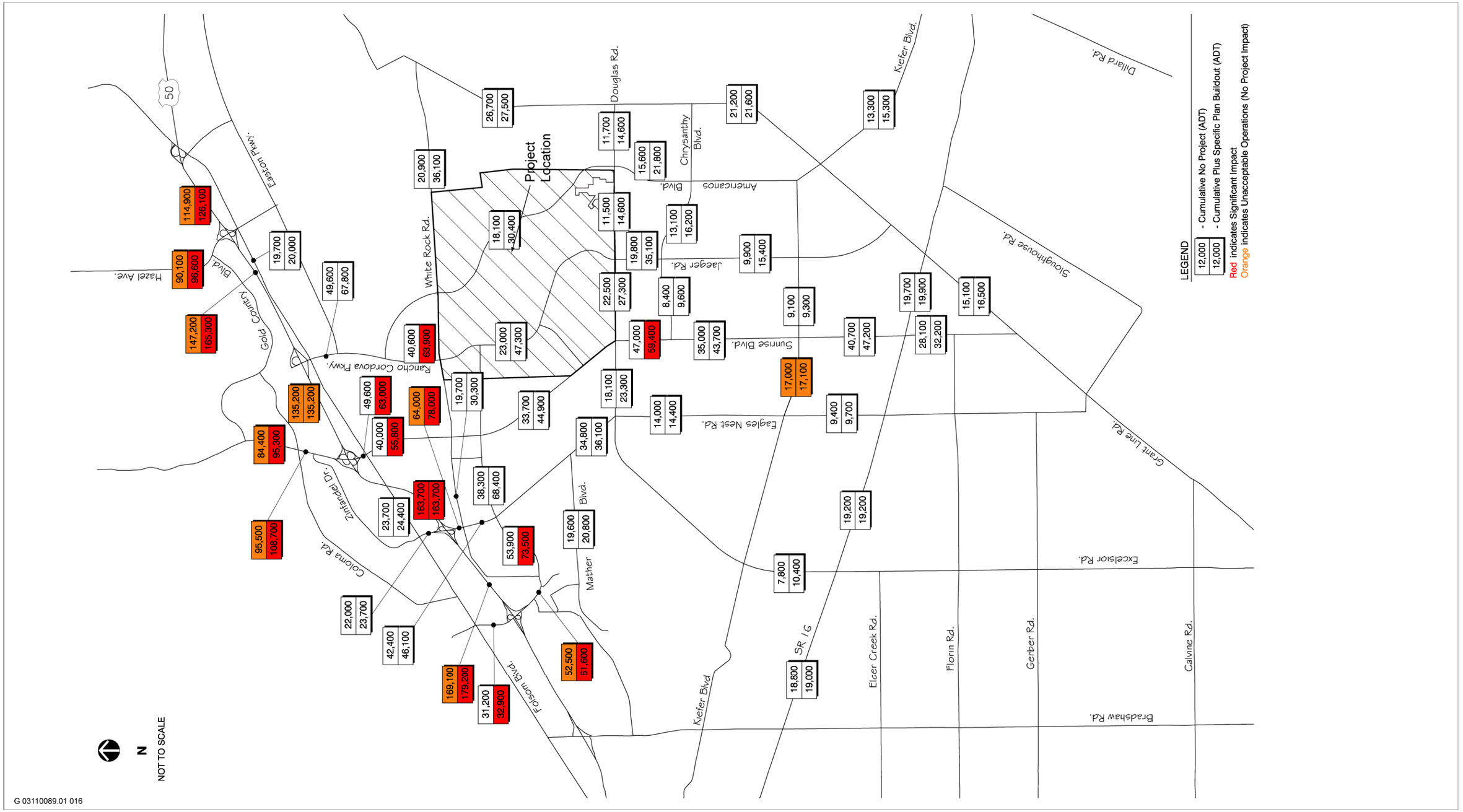
Source: Fehr & Peers 2006

Peak Hour Traffic Volumes, Lane Configurations, and Traffic Control-Cumulative Plus Full Buildout Conditions

EXHIBIT 3.14-13



Source: Fehr & Peers 2006

Average Daily Traffic Volumes –Cumulative Plus Full Buildout Conditions

EXHIBIT 3.14-14

Rio del Oro Specific Plan Project DEIR/DEIS
City of Rancho Cordova and USACE
P 3T089.01 10/06

EDAW

Table 3.14-13
Intersection Levels of Service—Cumulative (2030) Conditions

Intersection	Control	No Project Alternative				Proposed Project Alternative				High Density Alternative				Impact Minimization Alternative			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		V/C or Delay[1,2]	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
1. SR 16/Excelsior Road	Signalized	0.73	C	0.63	B	0.76	C	0.65	B	0.79	C	0.61	B	0.76	C	0.61	B
2. SR 16/Eagles Nest Road	Signalized	0.84	D	0.76	C	0.87	D	0.78	C	**0.91**	**E**	0.77	C	0.84	D	0.76	C
3. SR 16/Sunrise Boulevard	Signalized	1.06	F	0.82	D	1.06	F	0.87	D	1.06	F	0.88	D	1.04	F	0.85	D
4. SR 16/Grant Line Road	Signalized	0.69	B	0.45	A	0.72	C	0.49	A	0.70	B	0.50	A	0.70	B	0.50	A
5. Florin Road/Sunrise Boulevard	Signalized	0.76	C	0.70	C	0.80	D	0.79	C	0.83	D	0.78	C	0.78	C	0.75	C
6. Grant Line Road/Sunrise Boulevard	Signalized	1.33	F	1.41	F	**1.48**	**F**	**1.59**	**F**	**1.42**	**F**	**1.62**	**F**	**1.49**	**F**	**1.61**	**F**
7. Grant Line Road/Kiefer Boulevard	All-Way Stop	> 180	F	104	F	**> 180**	**F**	**1.67**	**F**	**> 180**	**F**	**151**	**F**	**> 180**	**F**	**153**	**F**
8. Douglas Road/Grant Line Road	Side-Street Stop	> 180	F	>180	F	**> 180**	**F**	**> 180**	**F**	**> 180**	**F**	177	F	**> 180**	**F**	**> 180**	**F**
9. Douglas Road/Sunrise Boulevard	Signalized	0.99	E	1.01	F	**1.14**	**F**	**1.21**	**F**	**1.08**	**F**	**1.24**	**F**	**1.18**	**F**	**1.24**	**F**
10. Mather Field Road/Folsom Boulevard	Signalized	0.99	E	1.18	F	1.00	F	1.19	F	1.00	E	1.18	F	1.01	F	1.18	F
11. Mather Field Road/U.S. 50 westbound ramps	Signalized	0.68	B	0.70	C	0.70	B	0.73	C	0.72	C	0.74	C	0.70	B	0.73	C
12. Mather Field Road/U.S. 50 eastbound ramps	Signalized	1.02	F	0.71	C	**1.14**	**F**	0.86	D	**1.12**	**F**	0.86	D	**1.12**	**F**	0.85	D
13. Mather Field Road/International Drive	Signalized	1.30	F	1.29	F	**1.78**	**F**	**1.78**	**F**	**1.71**	**F**	**1.66**	**F**	**1.66**	**F**	**1.73**	**F**
14. Zinfandel Drive/International Drive	Signalized	1.09	F	1.18	F	**1.32**	**F**	**1.39**	**F**	**1.32**	**F**	**1.38**	**F**	**1.28**	**F**	**1.38**	**F**
15. Zinfandel Drive/White Rock Road	Signalized	1.02	F	1.09	F	**1.33**	**F**	**1.36**	**F**	**1.32**	**F**	**1.42**	**F**	**1.29**	**F**	**1.36**	**F**
16. Zinfandel Drive/U.S. 50 eastbound ramps	Signalized	0.89	D	1.05	F	**1.09**	**F**	**1.26**	**F**	**1.10**	**F**	**1.27**	**F**	**1.08**	**F**	**1.23**	**F**
17. Zinfandel Drive/U.S. 50 westbound ramps	Signalized	0.66	B	0.73	C	0.68	B	0.76	D	0.73	C	0.73	C	0.67	B	0.75	C
18. Sunrise Boulevard/White Rock Road	Signalized	1.17	F	0.93	E	**1.64**	**F**	**1.37**	**F**	**1.61**	**F**	**1.39**	**F**	**1.70**	**F**	**1.36**	**F**
19. Sunrise Boulevard/Folsom Boulevard	Signalized	0.92	E	0.91	E	**1.06**	**F**	**1.05**	**F**	**1.06**	**F**	**1.06**	**F**	**1.06**	**F**	**1.06**	**F**
20. Sunrise Boulevard/U.S. 50 eastbound ramps	Signalized	0.57	A	0.64	B	0.65	B	0.75	C	0.64	B	0.75	C	0.67	B	0.75	C

Table 3.14-13
Intersection Levels of Service—Cumulative (2030) Conditions

Intersection	Control	No Project Alternative				Proposed Project Alternative				High Density Alternative				Impact Minimization Alternative			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		V/C or Delay[1,2]	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS
21. Sunrise Boulevard/U.S. 50 westbound ramps	Signalized	0.75	C	1.07	F	0.85	D	**1.18**	**F**	0.85	D	**1.17**	**F**	0.85	D	**1.18**	**F**
22. Sunrise Boulevard/Zinfandel Drive	Signalized	1.26	F	2.10	F	**1.39**	**F**	**2.22**	**F**	**1.39**	**F**	**2.21**	**F**	**1.39**	**F**	**2.22**	**F**
23. Hazel Avenue/Folsom Boulevard[3]	Signalized	1.30	F	1.72	F	1.31	F	**1.78**	**F**	1.34	F	**1.81**	**F**	1.34	F	**1.85**	**F**
24. Hazel Avenue/U.S. 50 eastbound ramps	Signalized	1.36	F	1.55	F	**1.47**	**F**	**1.70**	**F**	**1.48**	**F**	**1.69**	**F**	**1.46**	**F**	**1.68**	**F**
25. Hazel Avenue/U.S. 50 westbound ramps	Signalized	1.87	F	1.43	F	**1.94**	**F**	**1.51**	**F**	**1.98**	**F**	**1.50**	**F**	**2.01**	**F**	**1.50**	**F**
26. White Rock Road/Grant Line Road	Signalized	1.45	F	1.37	F	**1.63**	**F**	**1.48**	**F**	**1.68**	**F**	**1.47**	**F**	**1.67**	**F**	**1.48**	**F**
27. Sunrise Boulevard/Kiefer Boulevard	Signalized	0.86	D	0.81	D	**0.90**	**E**	**0.90**	**E**	0.87	D	**0.90**	**E**	0.89	D	0.90	D
28. Eagles Nest Road/Kiefer Boulevard	Signalized	0.86	D	0.71	C	0.89	D	0.73	C	0.87	D	0.68	B	**0.90**	**E**	0.76	C
29. Sunrise Boulevard/International Drive	Signalized	1.35	F	1.05	F	**2.05**	**F**	**1.89**	**F**	**2.06**	**F**	**2.07**	**F**	**2.00**	**F**	**1.91**	**F**
30. Rancho Cordova Parkway/White Rock Road	Signalized	1.38	F	1.16	F	**1.67**	**F**	**1.43**	**F**	**1.68**	**F**	**1.43**	**F**	**1.70**	**F**	**1.50**	**F**
31. Rancho Cordova Parkway/U.S. 50 eastbound ramps	Signalized	0.86	D	0.96	E	**1.07**	**F**	**1.19**	**F**	**1.04**	**F**	**1.19**	**F**	**1.03**	**F**	**1.18**	**F**
32. Rancho Cordova Parkway/U.S. 50 westbound ramps	Uncontrolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33. Douglas Road/Jaeger Road	Signalized	0.45	A	0.63	B	0.78	C	**0.94**	**E**	0.80	D	**0.95**	**E**	0.79	C	0.86	D
34. Douglas Road/Americanos Boulevard	Signalized	0.55	A	0.72	C	0.84	D	**0.99**	**E**	0.83	D	**0.97**	**E**	0.85	D	**0.96**	**E**
35. Chrysanthy Boulevard/Sunrise Boulevard	Signalized	0.84	D	0.53	A	**0.98**	**E**	0.66	B	**1.01**	**F**	0.69	B	**1.01**	**F**	0.69	B
36. Chrysanthy Boulevard/Jaeger Road	Signalized	0.61	B	0.43	A	0.89	D	0.68	B	0.89	D	0.67	B	0.87	D	0.66	B
37. Chrysanthy Boulevard/Americanos Boulevard	Signalized	0.43	A	0.54	A	0.53	A	0.68	B	0.54	A	0.67	B	0.53	A	0.66	B
38. Kiefer Boulevard/Jaeger Road	Signalized	0.67	B	0.60	B	0.81	D	0.77	C	0.79	C	0.70	B	0.79	C	0.74	C
39. White Rock Road/Americanos Boulevard	Signalized	0.86	D	0.62	B	**1.30**	**F**	**1.01**	**F**	**1.29**	**F**	**1.02**	**F**	**1.25**	**F**	**0.98**	**E**
40. Hazel Avenue/Gold Country Boulevard	Signalized	1.40	F	1.04	F	1.44	F	**1.10**	**F**	1.44	F	**1.10**	**F**	1.44	F	**1.10**	**F**
41. White Rock Road/Kilgore Road	Signalized	0.65	B	0.42	A	0.80	C	0.62	B	0.80	C	0.62	B	0.80	C	0.62	B

Notes:
LOS = level of service; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity
[1] V/C ratio is shown for signalized intersections. Delay is shown for unsignalized intersections.
[2] Worst-case delay reported for unsignalized, side-street-stop intersections; average intersection delay reported for all-way-stop intersections. Both delays are reported in seconds per vehicle.
[3] The project changes traffic distribution at this intersection such that traffic is added to noncritical movements (traffic is reduced at critical movements). Therefore, V/C of the critical movements decreases with the project.
Shaded areas indicate deficiency. **Bold** indicates impact.
Source: Data provided by Fehr & Peers in 2005

Table 3.14-14
Roadway Segment Levels of Service—Cumulative (2030) Conditions

Roadway Segment	Lanes	No Project Alternative			Proposed Project Alternative			High Density Alternative			Impact Minimization Alternative		
		Vol	V/C	LOS	Vol	V/C	LOS	Vol	V/C	LOS	Vol	V/C	LOS
1. SR 16—Excelsior Road to Eagles Nest Road	4	19,200	0.53	A	19,200	0.53	A	18,900	0.53	A	18,800	0.52	A
2. SR 16—Sunrise Boulevard to Grant Line Road	4	19,700	0.55	A	19,900	0.55	A	19,900	0.55	A	19,900	0.55	A
3. Kiefer Boulevard—Grant Line Road to north of SR 16	2	13,300	0.78	E	15,300	0.90	E	15,300	0.90	E	15,200	0.89	E
4. Mather Boulevard—Femoyer Street to Douglas Road	4	19,600	0.54	A	20,800	0.58	A	20,700	0.58	A	20,600	0.57	A
5. Douglas Road—Mather Boulevard to Sunrise Boulevard	6	18,100	0.34	A	23,300	0.43	A	23,600	0.44	A	22,700	0.42	A
6. International Drive—South White Rock Road to Zinfandel Drive	6	53,900	0.67	C	**73,500**	**0.91**	**E**	**74,800**	**0.92**	**E**	**73,900**	**0.91**	**E**
7. International Drive—Zinfandel Drive to Kilgore Road	6	38,300	0.47	B	68,400	0.84	D	71,200	0.88	D	68,900	0.85	D
8. White Rock Road—Zinfandel Drive to Sunrise Boulevard	6	19,700	0.36	A	30,300	0.56	A	29,900	0.55	A	29,100	0.54	A
9. White Rock Road—Sunrise Boulevard to Grant Line Road	6	20,900	0.35	A	36,100	0.60	B	36,300	0.45	B	34,500	0.43	B
10. Folsom Boulevard—Zinfandel Drive to Sunrise Boulevard	4	23,700	0.66	B	24,400	0.68	B	24,500	0.68	B	24,400	0.68	B
11. Folsom Boulevard—Sunrise Boulevard to Hazel Avenue	4	19,700	0.55	A	20,000	0.56	A	20,000	0.56	A	20,000	0.56	A
12. Mather Field Road—Folsom Boulevard to U.S. 50 westbound ramps	4	31,200	0.87	D	**32,900**	**0.91**	**E**	**32,800**	**0.91**	**E**	**33,100**	**0.92**	**E**
13. Mather Field Road—U.S. 50 eastbound ramps to International Drive	6	52,500	0.97	E	**61,600**	**1.14**	**F**	**62,100**	**1.15**	**F**	**61,600**	**1.14**	**F**
14. Zinfandel Drive—Folsom Boulevard to U.S. 50 westbound ramps	4	22,000	0.61	B	23,700	0.66	B	23,800	0.66	B	23,700	0.66	B
15. Zinfandel Drive—U.S. 50 eastbound ramps to White Rock Road	6	64,000	1.19	F	**78,000**	**1.44**	**F**	**77,800**	**1.44**	**F**	**77,200**	**1.43**	**F**
16. Zinfandel Drive—White Rock Road to International Drive	6	42,400	0.26	A	46,100	0.45	B	46,500	0.86	D	46,500	0.86	D
17. Sunrise Boulevard—Gold Country Boulevard to Coloma Road	6	84,400	1.41	F	**95,300**	**1.59**	**F**	**95,100**	**1.59**	**F**	**94,900**	**1.58**	**F**
18. Sunrise Boulevard—Coloma Road to U.S. 50 westbound ramps	6	95,500	1.59	F	**108,700**	**1.81**	**F**	**108,800**	**1.81**	**F**	**108,400**	**1.81**	**F**
19. Sunrise Boulevard—U.S. 50 eastbound ramps to Folsom Boulevard	6	49,600	0.83	D	**63,000**	**1.05**	**F**	**63,800**	**1.06**	**F**	**62,600**	**1.04**	**F**
20. Sunrise Boulevard—Folsom Boulevard to White Rock Road	6	40,000	0.67	B	**55,800**	**0.93**	**E**	**57,000**	**0.95**	**E**	**55,400**	**0.92**	**E**
21. Sunrise Boulevard—White Rock Road to Douglas Road	6	33,700	0.62	B	44,900	0.83	D	46,600	0.86	D	44,300	0.82	D
22. Sunrise Boulevard—SR 16 to Grant Line Road	6	28,100	0.52	A	32,200	0.60	A	31,800	0.59	A	31,900	0.59	A
23. Hazel Avenue—Winding Way to U.S. 50 westbound ramps	6	90,100	1.50	F	**96,600**	**1.61**	**F**	**96,700**	**1.61**	**F**	**96,800**	**1.61**	**F**
24. Grant Line Road—White Rock Road to Douglas Road	6	26,700	0.33	B	27,500	0.34	B	27,300	0.34	B	28,100	0.35	B
25. Grant Line Road—Douglas Road to SR 16	6	21,200	0.26	A	21,600	0.27	A	21,500	0.27	A	21,800	0.27	A
26. Grant Line Road—SR 16 to Sunrise Boulevard	6	15,100	0.25	A	16,500	0.28	A	16,700	0.28	A	16,500	0.28	A

Table 3.14-14
Roadway Segment Levels of Service—Cumulative (2030) Conditions

Roadway Segment	Lanes	No Project Alternative			Proposed Project Alternative			High Density Alternative			Impact Minimization Alternative		
		Vol	V/C	LOS	Vol	V/C	LOS	Vol	V/C	LOS	Vol	V/C	LOS
27. U.S. 50—Mather Field Road to Zinfandel Drive	8	169,100	1.06	F	**179,200**	**1.12**	**F**	**178,400**	**1.12**	**F**	**178,100**	**1.11**	**F**
28. U.S. 50—Zinfandel Drive to Sunrise Boulevard	8	163,700	1.02	F	163,700	1.02	F	163,400	1.02	F	163,300	1.02	F
29. U.S. 50—Sunrise Boulevard to Rancho Cordova Parkway	6	135,200	1.13	F	135,200	1.13	F	135,200	1.13	F	132,900	1.11	F
30. U.S. 50—Rancho Cordova Parkway to Hazel Avenue	6	147,200	1.23	F	**165,300**	**1.38**	**F**	**166,200**	**1.39**	**F**	**162,500**	**1.35**	**F**
31. U.S. 50—Hazel Avenue to Folsom Boulevard	6	114,900	0.96	E	**126,100**	**1.05**	**F**	**126,400**	**1.05**	**F**	**125,400**	**1.05**	**F**
32. Douglas Road—Sunrise Boulevard to Jaeger Road	6	22,500	0.42	A	27,300	0.51	A	28,100	0.52	A	26,200	0.49	A
33. Douglas Road—Americanos Boulevard to Grant Line Road	4	11,700	0.33	A	14,600	0.41	A	15,000	0.42	A	14,400	0.40	A
34. Douglas Road—Jaeger Road to Americanos Boulevard	6	11,500	0.21	A	14,600	0.27	A	15,100	0.28	A	14,200	0.26	A
35. Chrysanthy Boulevard—Sunrise Boulevard to Jaeger Road	4	8,400	0.23	A	9,600	0.27	A	9,800	0.27	A	9,700	0.27	A
36. Chrysanthy Boulevard—Jaeger Road to Americanos Boulevard	4	13,100	0.36	A	16,200	0.45	A	16,500	0.46	A	16,000	0.44	A
37. Kiefer Boulevard—Eagles Nest Road to Sunrise Boulevard	2	17,000	0.94	E	17,100	0.95	E	17,000	0.94	E	17,000	0.94	E
38. Kiefer Boulevard—Sunrise Boulevard to Jaeger Road	4	9,100	0.25	A	9,300	0.26	A	9,500	0.26	A	9,700	0.27	A
39. Eagles Nest Road (Zinfandel Drive)—Mather Boulevard to Douglas Road	6	34,800	0.64	B	36,100	0.67	B	35,800	0.66	B	35,900	0.66	B
40. Eagles Nest Road—Douglas Road to Kiefer Boulevard	4	14,000	0.39	A	14,400	0.40	A	14,200	0.39	A	14,300	0.40	A
41. Eagles Nest Road—Kiefer Boulevard to SR 16	4	9,400	0.26	A	9,700	0.27	A	9,300	0.26	A	9,600	0.27	A
42. Sunrise Boulevard—Douglas Road to Chrysanthy Boulevard	6	47,000	0.87	D	**59,400**	**1.10**	**F**	**60,100**	**1.11**	**F**	**59,800**	**1.11**	**F**
43. Sunrise Boulevard—Chrysanthy Boulevard to Kiefer Boulevard	6	35,000	0.65	B	43,700	0.81	D	44,200	0.82	D	44,000	0.81	D
44. Sunrise Boulevard—Kiefer Boulevard to SR 16	6	40,700	0.61	C	47,200	0.84	D	47,300	0.85	D	46,900	0.84	D
45. Rancho Cordova Parkway—U.S. 50 to Easton Valley Parkway	6	49,600	0.50	C	67,800	0.79	D	68,900	0.80	D	67,700	0.79	D
46. Rancho Cordova Parkway—Easton Valley Parkway to White Rock Road	6	40,600	0.68	B	**63,900**	**1.07**	**F**	**64,400**	**1.07**	**F**	**64,000**	**1.07**	**F**
47. Rancho Cordova Parkway—White Rock Road to Douglas Road	6	23,000	0.43	A	47,300	0.88	D	**50,100**	**0.93**	**E**	**49,800**	**0.92**	**E**
48. Jaeger Road—Douglas Road to Chrysanthy Boulevard	6	19,800	0.37	A	35,100	0.65	B	36,200	0.67	B	33,600	0.62	B
49. Jaeger Road—Chrysanthy Boulevard to Kiefer Boulevard	4	9,900	0.28	A	15,400	0.43	A	15,700	0.44	A	14,900	0.41	A
50. Americanos Boulevard—White Rock Road to Douglas Road	4	18,100	0.50	A	30,400	0.84	D	**32,900**	**0.91**	**E**	30,900	0.86	D
51. Americanos Boulevard—Douglas Road to Chrysanthy Boulevard	4	15,600	0.43	A	21,800	0.61	B	21,800	0.61	B	21,800	0.61	B
52. Excelsior Road—North of SR 16	2	7,800	0.43	A	10,400	0.58	A	10,400	0.58	A	10,200	0.57	A
53. SR 16—West of Excelsior Road	6	18,800	0.31	A	19,000	0.32	A	18,300	0.31	A	18,400	0.31	A

Notes:
SR = State Route; U.S. 50 = U.S. Highway 50; V/C = volume-to-capacity
Shaded areas indicate deficiency. Bold indicates impact.
Source: Data provided by Fehr & Peers in 2005

Table 3.14-15
Merge/Diverge/Weave Levels of Service—Cumulative Conditions

Ramps	Merge, Diverge, or Weave?	No Project Alternative				Specific Plan Buildout				High Density Alternative				Impact Minimization Alternative			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		Density[1]	LOS[2]	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS	Density	LOS
Eastbound U.S. 50																	
Mather Field Road direct off-ramp	Diverge	46	F	38	E	50	F	42	F	50	F	43	F	50	F	42	F
Mather Field Road loop on-ramp	Merge	23	C	21	C	24	C	22	C	24	C	22	C	24	C	22	C
Mather Field Road direct on-ramp	Merge	23	C	21	C	23	C	22	C	24	C	22	C	23	C	22	C
Zinfandel Drive direct off-ramp	Diverge	23	C	16	B	26	C	20	B	26	C	20	C	26	C	19	B
Zinfandel Drive loop on-ramp	Merge	22	C	23	C	22	C	23	C	22	C	23	C	22	C	23	C
Zinfandel Drive direct on-ramp	Merge	22	C	23	C	22	C	23	C	23	C	23	C	22	C	23	C
Sunrise Boulevard direct off-ramp	Diverge	25	C	30	F	25	C	30	F	26	C	30	F	25	C	29	F
Sunrise Boulevard loop/direct on-ramp	Merge	38	F	37	F	38	F	37	F	38	F	37	F	38	F	37	F
Rancho Cordova Parkway direct off-ramp[3]	Diverge	39	E	39	E	39	E	39	E	39	E	39	E	39	E	39	E
Rancho Cordova Parkway direct on-ramp[3]	Merge	43	F	39	F	48	F	44	F	49	F	44	F	48	F	44	F
Hazel Avenue direct off-ramp	Diverge	29	F	26.0	C	32	F	30	F	33	F	30	F	33	F	31	F
Hazel Avenue loop/direct on-ramp Aerojet direct off-ramp	Weave	NA	E	NA	D	NA	E	NA	D	NA	E	NA	D	NA	E	NA	D
Westbound U.S. 50																	
Hazel Avenue direct off-ramp	Diverge	47	F	53	F	54	F	58	F	54	F	58	F	55	F	59	F
Hazel Avenue loop on-ramp	Merge	38	E	45	F	45	F	49	F	45	F	50	F	46	F	49	F
Rancho Cordova Parkway direct off-ramp[3]	Diverge	29	E	42	F	44	F	46	F	44	F	46	F	44	F	46	F
Rancho Cordova Parkway loop on-ramp[3]	Merge	39	F	42	F	39	F	42	F	39	F	41	F	39	F	42	F
Sunrise Boulevard direct off-ramp	Diverge	27	C	32	F	27	C	32	F	27	C	32	F	27	C	32	F
Zinfandel Drive direct off-ramp	Diverge	38	E	35	E	39	E	35	E	38	E	35	D	39	E	35	E
Zinfandel Drive loop on-ramp	Merge	30	D	28	C	31	D	28	D	30	D	29	D	31	D	28	D
Zinfandel Drive direct on-ramp	Merge	38	F	36	F	40	F	38	F	39	F	39	F	40	F	38	F
Mather Field Road direct off-ramp	Diverge	42	F	37	E	44	F	38	E	44	F	39	E	45	F	38	E
Mather Field Road loop on-ramp	Merge	34	D	30	D	36	F	31	D	36	F	32	D	36	F	31	D
Mather Field Road direct on-ramp	Merge	43	F	41	F	47	F	44	F	46	F	44	F	47	F	43	F

Notes:
LOS = level of service; NA = not applicable; NA = not applicable; U.S. 50 = U.S. Highway 50
[1] Density in passenger cars per mile per lane for merge/diverge analysis only.
[2] LOS computed using Highway Capacity Software (HCS) 2000 software for the merge/diverge analysis consistent with Highway Capacity Manual (HCM) 2000 methodologies. Weave analysis evaluated using the Leisch Method for Weaving Analysis.
[3] Rancho Cordova Parkway interchange assumed to have similar geometrics to nearby interchanges. One lane assumed on all ramps (a conservative assumption).
Shaded areas indicate deficiency where calculation indicates demand exceeds capacity.
Source: Data provided by Fehr & Peers in 2005

For improvements to the following intersections and roadway improvements, the following impacts (in addition to the above) could result from implementation of required improvements:

- Direct impacts on LRT service in the area—Sunrise Boulevard/Folsom Boulevard (Intersection 19)
- Direct impacts from required grade separation structure—Sunrise Boulevard/Zinfandel Drive and Hazel Avenue/Folsom Boulevard intersections (Intersections 22 and 23, respectively)
- Direct impacts on the Folsom South Canal—Eagles Nest Road/Kiefer Boulevard and Sunrise Boulevard/International Drive intersections (Intersections 28 and 29, respectively)
- Direct impacts from required new river crossings of the American River—Sunrise Boulevard between Gold Country Boulevard and Coloma Road and Sunrise Boulevard between Coloma Road and the U.S. 50 westbound ramps (Roadway Segments 17 and 18, respectively)
- Direct impacts from potential removal of approximately 80 utility poles, 60 street lights, approximately 50 large trees, and commercial/industrial property, resulting from improvements to Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20)
- Direct impacts from potential removal of approximately 60 utility poles, 100 street lights, approximately 40 large trees (primarily oak and landscaped trees), and commercial/industrial property, resulting from improvements to Sunrise Boulevard between White Rock Road and Douglas Road (Roadway Segment 21).

NP No mitigation measures are required.

The following impacts and mitigation measures apply only to those intersections, roadways, and freeway ramps where significant, direct impacts would occur. Summary impacts are followed by required mitigation measures. Note that no mitigation measures are required for Impacts 3.14-7a through 3.14-7pp under the No Project Alternative. As stated above in the summary discussion of Impact 3.14-7, under this alternative there would be no project-related traffic that would affect the regional transportation system; therefore, there would be no cumulative impacts under the No Project Alternative.

IMPACT 3.14-7a

Unacceptable LOS at the SR 16/Eagles Nest Road Intersection (Intersection 2) under Cumulative (2030) Conditions. *This signalized intersection would operate at an acceptable level during both the a.m. and p.m. peak traffic hours with traffic from the Proposed Project, Impact Minimization, and No Project Alternatives under cumulative (2030) conditions. However, operations would degrade from an acceptable LOS D to an unacceptable LOS E during the a.m. peak traffic hour with traffic from the High Density Alternative.*

Mitigation Measure 3.14-7a: Participate in Improvements to the SR 16/Eagles Nest Road Intersection (Intersection 2).

HD To ensure that the SR 16/Eagles Nest Road intersection operates at an acceptable LOS D or better, the northbound approach must be reconfigured to consist of one left-turn lane, two through lanes, and one dedicated right-turn lane.

Improvements to the SR 16/Eagles Nest Road intersection are contained within the *SunRidge Specific Plan Public Facilities Financing Plan* and zoning conditions. The CEQA Findings of Fact and Statement of Overriding Considerations for the Sunrise Douglas Community Plan/SunRidge Specific Plan Project state that physical improvement of this intersection is feasible. Implementation of these improvements would reduce traffic impacts on this intersection.

Improvements to this intersection must be coordinated with Caltrans and the County.

PP, IM, NP No mitigation measures are required.

Implementation of Mitigation Measure 3.14-7a would reduce the significant impact on Intersection 2 from the High Density Alternative under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D or better. However, the identified improvements fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7b

Unacceptable LOS at the Grant Line Road/Sunrise Boulevard Intersection (Intersection 6) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project-related traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7b: Participate in Improvements to the Grant Line Road/Sunrise Boulevard Intersection (Intersection 6).

PP, HD, IM To ensure that the Grant Line Road/Sunrise Boulevard intersection operates at an acceptable LOS D or better, all of the following improvements are required:

- The northbound approach must be reconfigured to consist of one left-turn lane and a shared through/right-turn lane.
- The southbound approach must be reconfigured to consist of one left-turn lane, one through lane, and two right-turn lanes with overlap right-turn signal phase.
- The eastbound approach must be reconfigured to consist of two left-turn lanes, two through lanes, and a shared through/right-turn lane.
- The westbound approach must be reconfigured to consist of one left-turn lane, two through lanes, and a shared through/right-turn lane.

Interim improvements to the Grant Line Road/Sunrise Boulevard intersection are contained within the Elk Grove West Vineyard Plan, with ultimate improvements contained within the *Vineyard Springs Comprehensive Plan Public Financing Plan*. These intersection improvements must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7b would reduce the significant impact on Intersection 6 under the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, these identified improvements fall under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7c

Unacceptable LOS at the Grant Line Road/Kiefer Boulevard Intersection (Intersection 7) under Cumulative (2030) Conditions. *This unsignalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase delay at this intersection by more than 5 seconds during the a.m. and p.m. peak traffic hours.*

Mitigation Measure 3.14-7c: Participate in Improvements to the Grant Line Road/Kiefer Boulevard Intersection (Intersection 7).

PP, HD, IM To ensure that the Grant Line Road/Kiefer Boulevard intersection operates at an acceptable LOS D or better, all of the following improvements are required:

- A traffic signal must be installed at this intersection. The southbound approach must be reconfigured to consist of one left-turn lane, three through lanes, and one dedicated right-turn lane.
- The eastbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one dedicated right-turn lane.
- The westbound approach must be reconfigured to consist of one left-turn lane, one through lane, and one right-turn lane.

Improvements to this intersection must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7c would reduce the significant impact on Intersection 7 under the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, portions of this intersection fall under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of all of the identified improvements. Thus, this impact would remain **significant and unavoidable.** If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7d

Unacceptable LOS at the Grant Line Road/Douglas Road Intersection (Intersection 8) under Cumulative (2030) Conditions. *This unsignalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase delay on the worst-case approach by more than 5 seconds during the a.m. and p.m. peak traffic hours.*

Mitigation Measure 3.14-7d: Participate in Improvements to the Grant Line Road/Douglas Road Intersection (Intersection 8).

PP, HD, IM To ensure that the Grant Line Road/Douglas Road intersection operates at an acceptable LOS D or better, a traffic signal must be installed at this intersection. Improvements to this intersection are contained within the *SunRidge Specific Plan Public Financing Plan.*

Implementation of Mitigation Measure 3.14-7d would reduce the significant impact on Intersection 8 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7e

Unacceptable LOS at the Sunrise Boulevard/Douglas Road Intersection (Intersection 9) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with and without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7e: Participate in Improvements to the Sunrise Boulevard/Douglas Road Intersection (Intersection 9).

PP, HD, IM To improve LOS at the Sunrise Boulevard/Douglas Road intersection, all approaches must be reconfigured to consist of two left-turn lanes, three through lanes, and one right-turn lane.

However, even with these improvements, this intersection would continue to operate at an unacceptable LOS. For this intersection to operate at an acceptable LOS, additional roadway connectivity is required. To achieve this connectivity, the Kiefer Boulevard Extension between Rancho Cordova and Sacramento must be implemented. Additional intersection improvements could be implemented consistent with the City's Circulation Element/Plan, including partial grade separation of the intersection and/or aggressive at-grade treatments such as triple left-turn lanes, enhanced-capacity right-turn treatments, or conversion into a continuous-flow intersection.

Improvements to this intersection are contained within the *SunRidge Specific Plan Public Financing Plan*, but this public financing plan would not be able to fund all of the improvements described above. These intersection improvements must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7e would partially reduce the significant impact on Intersection 9 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions. However, implementation of this measure would not reduce the impact to a less-than-significant level. For the intersection to operate at an acceptable LOS D or better and to completely offset the impacts of the project, additional improvements (consistent with the City's Circulation Element/Plan and CIP) are required. However, the required additional connectivity on Kiefer Boulevard between Rancho Cordova and Sacramento falls under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of this improvement. The feasibility of the aggressive at-grade or partial grade-separated alternatives, such as partial grade separation, capacity-enhancing right-turn treatments, or implementation of a continuous-flow intersection, has not been determined as no specific designs have been developed and environmental constraints have not been identified. Given these conditions, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7f Unacceptable LOS at the Mather Field Road/U.S. 50 Eastbound Ramps Intersection (Intersection 12) under Cumulative (2030) Conditions. *Operations at this signalized intersection would degrade from LOS E to LOS F, and the V/C ratio at this intersection would increase by 0.05 or more during the a.m. peak traffic hour, with the addition of project traffic under cumulative (2030) conditions. During the p.m. peak traffic hour, project traffic would cause intersection operations to degrade from an acceptable LOS D to an unacceptable LOS E.*

Mitigation Measure 3.14-7f: Participate in Improvements to the Mather Field Road/U.S. 50 Eastbound Ramps Intersection (Intersection 12).

PP, HD, IM To ensure that the Mather Field Road/U.S. 50 eastbound ramps intersection operates at an acceptable LOS D or better, the eastbound approach must be reconfigured to include an additional right-turn lane. Improvements to this intersection are identified in the City's Circulation Element/Plan and included in the City's CIP, and must be coordinated with Caltrans.

Implementation of Mitigation Measure 3.14-7f would reduce the significant impact on Intersection 12 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D or better. However, the required improvement to U.S. 50 falls under the jurisdiction of Caltrans; therefore, neither the City nor the project

applicant(s) would have control over the timing or implementation of this improvement. Thus, this impact would remain **significant and unavoidable**. If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7g

Unacceptable LOS at Mather Field Road/International Drive (Intersection 13) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with and without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7g: Participate in Improvements at the Mather Field Road/International Drive Intersection (Intersection 13).

PP, HD, IM

Southbound left-turn and westbound right-turn volumes at the Mather Field Road/International Drive intersection are substantial enough that additional lanes at this intersection would not reduce impacts at the intersection; therefore, the intersection would continue to operate at an unacceptable LOS E or LOS F. However, additional roadway connectivity in the area, through measures such as implementation of the Kiefer Boulevard Extension to Sacramento, extension of Routier Road to the south, completion of the International Drive–Old Placerville Road connection, and construction of the potential tunnel under Mather Field, has the potential to shift traffic volumes to reduce traffic impacts at the intersection. These additional roadway connectivity measures are identified in the City's Circulation Element/Plan and included in the City's CIP. Implementation of these improvements would assist in reducing traffic impacts on this intersection by providing acceptable operations.

Improvements to this intersection must be coordinated with the County and other regulatory agencies because of the proximity of some of these improvements to Mather Field.

Implementation of Mitigation Measure 3.14-7g would reduce the significant impact on Intersection 13 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level. The identified roadway connectivity improvements (consistent with the City's Circulation Element/Plan and CIP) would shift traffic volumes and reduce traffic impacts at the intersection. However, the Kiefer Boulevard Extension and International Drive–Old Placerville Road connection fall under the jurisdiction of the County, and the Routier Road extension and tunnel construction under Mather Field would require coordination with other regulatory agencies because of their proximity to the airstrip. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of all the identified improvements.

Given these conditions, this impact would remain **significant and unavoidable**. If the County and other responsible agencies (such as the Federal Aviation Administration [FAA]) cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7h

Unacceptable LOS at the Zinfandel Drive/International Drive Intersection (Intersection 14) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7h: Participate in Improvements to the Zinfandel Drive/International Drive Intersection (Intersection 14).

PP, HD, IM Improvements must be made to improve LOS at the Zinfandel Drive/International Drive intersection. Specifically, this intersection should be reconfigured to provide three left-turn lanes, four through lanes, and one right-turn lane. Additionally, capacity enhancement is needed for the eastbound right-turn movement.

These improvements would reduce the cumulative impact caused by the proposed project and alternatives under consideration by providing acceptable LOS. However, widening International Drive to four through lanes is inconsistent with the City's Circulation Element/Plan because City policy requires roadway cross sections of six lanes or fewer.

To be consistent with the City's Circulation Element/Plan, aggressive at-grade improvements are required, such as partial grade separation, capacity-enhancing right-turn treatments on all approaches, or implementation of a continuous-flow intersection. Additionally, improved roadway connectivity, such as the extension of Kiefer Boulevard, International Drive–Old Placerville Road connection, and/or construction of the tunnel under Mather Field would shift traffic volumes and reduce traffic at the intersection.

The additional roadway connections described above and aggressive at-grade intersection treatments are identified in the City's Circulation Element/Plan and included in the City's CIP. Implementation of these improvements would assist in reducing traffic impacts on this intersection by providing acceptable operations.

Improvements to this intersection must be coordinated with the County and other regulatory agencies (such as FAA) because of the proximity of some of these improvements to Mather Field.

Implementation of Mitigation Measure 3.14-7h would reduce the significant impact on Intersection 14 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level. However, the Kiefer Boulevard Extension and International Drive–Old Placerville Road connection fall under the jurisdiction of the County, and the Routier Road extension and tunnel construction under Mather Field would require coordination with the FAA and other regulatory agencies because of their proximity to the airstrip. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of all the identified improvements.

Given these conditions, this impact would remain **significant and unavoidable**. If FAA and other regulatory agencies cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term, assuming the improvements are determined to be feasible.

IMPACT 3.14-7i Unacceptable LOS at the Zinfandel Drive/White Rock Road Intersection (Intersection 15) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7i: Participate in Improvements to the Zinfandel Drive/White Rock Road Intersection (Intersection 15).

PP, HD, IM Improvements required to provide acceptable LOS at the Zinfandel Drive/White Rock Road intersection consist of three left-turn lanes, four through lanes, and one right-turn lane on all approaches; and capacity enhancement treatments on the westbound right-turn movement.

Improvements to this intersection are identified in the City's Circulation Element/Plan and included in the City's CIP. Implementation of the identified improvements would assist in reducing traffic impacts on this intersection by providing acceptable LOS. However, these improvements include widening the facility to more than six lanes, which is inconsistent with the City's General Element/Plan. Alternatively, partial grade separation could be implemented consistent with the City's Circulation Element/Plan and CIP; however, aggressive at-grade treatments such as partial grade separation have not been designed, and they could have geometric and/or environmental constraints that may make the treatments infeasible.

Implementation of Mitigation Measure 3.14-7i would partially reduce the significant impact on Intersection 15 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions and reduce the impact to a less-than-significant level. However, because one improvement is inconsistent with the City's General Element/Plan, and the other (partial grade separation) has not been designed, the improvements may be infeasible as a result of consistency, geometric, and/or environmental constraints. Therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of all the identified improvements.

Given these conditions, this impact would remain **significant and unavoidable**. If the other regulatory agencies cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term, assuming that the improvements are determined to be feasible.

IMPACT 3.14-7j

Unacceptable LOS at the Zinfandel Drive/U.S. 50 Eastbound Ramps Intersection (Intersection 16) under Cumulative (2030) Conditions. *This signalized intersection would operate at an acceptable LOS D during the a.m. peak traffic hour and an unacceptable LOS F during the p.m. peak traffic hour without the project under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05 and degrade a.m. peak-hour operations to an unacceptable LOS F.*

Mitigation Measure 3.14-7j: Participate in Improvements to the Zinfandel Drive/U.S. 50 Eastbound Ramps Intersection (Intersection 16).

PP, HD, IM

To ensure that the Zinfandel Drive/U.S. 50 eastbound ramps intersection operates at an acceptable LOS D or better, the following improvements are required:

- The northbound approach must be reconfigured to consist of four through lanes and a shared through/right-turn lane.
- The southbound approach must be reconfigured to consist of three through lanes and a free right-turn lane.
- The eastbound approach must be reconfigured to consist of three left-turn lanes, two through lanes, and a free right-turn lane.
- The westbound approach must be reconfigured to consist of three right-turn lanes.

Improvements to this intersection are identified in the City's Circulation Element/Plan and included in the City's CIP. Implementation of these improvements would assist in reducing traffic impacts on this intersection by providing acceptable operation. Intersection improvements must be coordinated with Caltrans.

Implementation of Mitigation Measure 3.14-7j would reduce the significant impact on Intersection 16 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a

less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable.** If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7k

Unacceptable LOS at the Sunrise Boulevard/White Rock Road Intersection (Intersection 18) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F and LOS E during the a.m. and p.m. peak traffic hours, respectively, with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7k: Participate in Improvements to the Sunrise Boulevard/White Rock Road Intersection (Intersection 18).

PP, HD, IM To ensure that the Sunrise Boulevard/White Rock Road intersection operates at an acceptable LOS, grade separation must be implemented at this intersection.

Some funding for intersection improvements to this intersection is identified in the *Mather Field Specific Plan Public Financing Plan* (Zinfandel Drive Extension), and grade separation of the intersection is in the City's Circulation Element/Plan and included in the City's CIP. The grade separation treatment has not been designed, however, and it could have geometric and/or environmental constraints that may make the treatment infeasible. No other feasible improvements are available at this intersection to ensure that it operates at an acceptable level.

Implementation of Mitigation Measure 3.14-7k would reduce the significant impact on Intersection 18 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, because the feasibility of grade separation at this location has not been determined, these identified improvements may not be feasible. No other feasible improvements are available at this intersection to ensure acceptable operations; therefore, this impact would remain **significant and unavoidable.** If the grade separation treatment is determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7l

Unacceptable LOS at the Sunrise Boulevard/Folsom Boulevard Intersection (Intersection 19) under Cumulative (2030) Conditions. *Operations at this signalized intersection would be an unacceptable LOS F during the a.m. peak traffic hour and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at the intersection by 0.05 or more.*

Mitigation Measure 3.14-7l: Participate in Improvements to the Sunrise Boulevard/Folsom Boulevard Intersection (Intersection 19).

PP, HD, IM Improvements must be made to ensure that the Sunrise Boulevard/Folsom Boulevard intersection operates at an acceptable LOS D or better. Specifically, all of the following improvements should be made:

- The northbound approach should be reconfigured to consist of three left-turn lanes, four through lanes, and one right-turn lane.
- The southbound approach should be reconfigured to consist of three left-turn lanes, four through lanes, and one right-turn lane.

- The eastbound approach should be reconfigured to consist of two left-turn lanes, two through lanes, and one right-turn lane.
- The westbound approach should be reconfigured to consist of two left-turn lanes, one through lane, one through/right-turn lane, and one right-turn lane.

These improvements would provide acceptable operations at this intersection. However, the identified improvements may be infeasible because of geometric constraints at this intersection caused by the grade-separated LRT tracks. These improvements must be coordinated with Sacramento RT.

Implementation of Mitigation Measure 3.14-7l would reduce significant impacts on Intersection 19 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, the intersection widening may not be possible because of geometric constraints associated with the grade-separated LRT tracks; therefore, this improvement may not be feasible. No other feasible improvements are available, and there is no assurance that the required improvements would be implemented.

Given these conditions, this impact would remain **significant and unavoidable.** If Sacramento RT cooperates in permitting the improvements, and the improvements are determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7m

Unacceptable LOS at the Sunrise Boulevard/U.S. 50 Westbound Ramps Intersection (Intersection 21) under Cumulative (2030) Conditions. *Operations at this signalized intersection would be an unacceptable LOS F during the p.m. peak traffic hours with or without project traffic. The project would increase the V/C ratio by 0.05 or more.*

Mitigation Measure 3.14-7m: Participate in Improvements to the Sunrise Boulevard/U.S. 50 Westbound Ramps Intersection (Intersection 21).

PP, HD, IM

To ensure that the Sunrise Boulevard/U.S. 50 westbound ramps intersection operates at an acceptable LOS D or better, the northbound and southbound approaches must be reconfigured to consist of three through lanes and one free (uncontrolled) right-turn lane; and the westbound approach must be reconfigured to consist of two left-turn lanes and a free right-turn lane with an adequate receiving lane on Sunrise Boulevard. Improvements to this intersection must be coordinated with Caltrans.

Implementation of Mitigation Measure 3.14-7m would reduce significant impacts on Intersection 21 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, the identified improvements fall under the jurisdiction of Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable.** If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7n

Unacceptable LOS at the Sunrise Boulevard/Zinfandel Drive Intersection (Intersection 22) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7n: Participate in Improvements to the Sunrise Boulevard/Zinfandel Drive Intersection (Intersection 22).

PP, HD, IM Improvements must be made to ensure that the Sunrise Boulevard/Zinfandel Drive intersection operates at an acceptable LOS; specifically, the northbound and southbound approaches should be reconfigured to consist of an additional through lane. These at-grade improvements are consistent with the County Mobility Study; however, they would be inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes or fewer.

An alternative to this improvement that is consistent with the City's Circulation Element/Plan and associated CIP is implementation of grade separation at this intersection.

Implementation of Mitigation Measure 3.14-7n would reduce the significant impact on Intersection 22 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, the intersection widening, which would require Sunrise Boulevard to be expanded to eight lanes, is inconsistent with the City's Circulation Element/Plan. The alternative improvement, grade separation of the intersection, is consistent with the City's Circulation Element/Plan. Because the grade-separation treatment has not been designed, it could have geometric and/or environmental constraints that may make the treatment infeasible. Therefore, because one improvement is inconsistent with the City's Circulation Element/Plan and the other may be infeasible, this impact would remain **significant and unavoidable**. If the grade separation alternative were deemed feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7o

Unacceptable LOS at the Hazel Avenue/Folsom Boulevard Intersection (Intersection 23) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7o: Participate in Improvements to the Hazel Avenue/Folsom Boulevard Intersection (Intersection 23).

PP, HD, IM For the Hazel Avenue/Folsom Boulevard intersection to operate at an acceptable LOS D or better, grade separation of the intersection is required. This improvement is consistent with the City's Circulation Element/Plan; however, the grade-separation treatment has not been designed, and it could have geometric and/or environmental constraints that may make the treatment infeasible.

Improvements to this intersection must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7o would reduce the significant impact on Intersection 22 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level. However, the feasibility of grade separation at this location has not been determined. Because the improvement may have as-yet-unknown potentially significant impacts, and because this intersection falls under the jurisdiction of the County, neither the City nor the project applicant(s) would have control over the timing or implementation of the improvement necessary to provide acceptable operations at the intersection. Thus, the impact would remain **significant and unavoidable**. If the County cooperates in permitting the identified improvements and they are determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7p

Unacceptable LOS at the Hazel Avenue/U.S. 50 Eastbound Ramps Intersection (Intersection 24) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7p: Participate in Improvements to the Hazel Avenue/U.S. 50 Eastbound Ramps Intersection (Intersection 24).

PP, HD, IM To ensure that the Hazel Avenue/U.S. 50 eastbound ramps intersection operates at an acceptable LOS D, all of the following improvements are required at this interchange:

- The structure across U.S. 50 must be widened to accommodate eight lanes (four in each direction) on the structure.
- The eastbound off-ramp approach must be reconfigured to consist of three left-turn lanes, a shared left/right-turn lane, and one right turn lane.

Improvements to this interchange must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-7p would reduce the significant impact on Intersection 24 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D. However, because the identified improvements fall under the jurisdiction of Caltrans and the County, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, the impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7q

Unacceptable LOS at the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Intersection 25) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7q: Participate in Improvements to the Hazel Avenue/U.S. 50 Westbound Ramps Intersection (Intersection 25).

PP, HD, IM Substantial improvements must be made to ensure that the Hazel Avenue/U.S. 50 westbound ramps intersection operates at an acceptable LOS D or better. Specifically, the following improvements should be made:

- The northbound approach should be reconfigured to consist of four through lanes and a free right-turn lane (this would require prohibiting northbound left turns to Tributary Point Drive).
- The southbound approach should be reconfigured to consist of five through lanes and a free right-turn lane.
- The eastbound approach should be reconfigured to consist of one free right-turn lane.
- The westbound approach should be reconfigured to consist of one left-turn lane, two through lanes, and one right-turn lane.

However, these improvements would prohibit northbound access to development west of the intersection and may be deemed infeasible in that access must be maintained.

Improvements to this intersection must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-7q would reduce the significant impact on Intersection 24 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, because the identified improvements fall under the jurisdiction of Caltrans and the County, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, the impact would remain **significant and unavoidable**. If Caltrans and the County cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7r

Unacceptable LOS at the Grant Line Road/White Rock Road Intersection (Intersection 26) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection during the a.m. and p.m. peak traffic hours by more than 0.05.*

Mitigation Measure 3.14-7r: Participate in Improvements to the Grant Line Road/White Rock Road Intersection (Intersection 26).

PP, HD, IM To ensure that the Grant Line Road/White Rock Road intersection operates at an acceptable LOS D or better, all of the following improvements are required:

- The northbound approach must be reconfigured to consist of three left-turn lanes and three through lanes.
- The southbound approach must be reconfigured to consist of two through lanes and two right-turn lanes.
- The eastbound approach must be reconfigured to consist of two left-turn lanes and one free (uncontrolled) right-turn lane.

Improvements to this intersection must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7r would reduce the significant impact on Intersection 26 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, because the identified improvements fall under the jurisdiction of the County, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, the impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7s

Unacceptable LOS at the Sunrise Boulevard/Kiefer Boulevard Intersection (Intersection 27) under Cumulative (2030) Conditions. *Operations at this signalized intersection would degrade from an acceptable LOS D to an unacceptable LOS E during the a.m. peak traffic hour with project traffic from the Proposed Project Alternative under cumulative (2030) conditions. Operations would degrade to an unacceptable LOS E during the p.m. peak traffic hour under the Proposed Project and High Density Alternatives.*

Mitigation Measure 3.14-7s: Participate in Improvements to the Sunrise Boulevard/Kiefer Boulevard Intersection (Intersection 27).

PP, HD To ensure that the Sunrise Boulevard/Kiefer Boulevard intersection operates at an acceptable LOS D or better, the northbound and southbound approaches must be reconfigured to consist of two left-turn lanes, three through lanes, and one right-turn lane.

Implementation of Mitigation Measure 3.14-7s would reduce significant impacts on Intersection 27 from the Proposed Project and High Density Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7t

Unacceptable LOS at the Eagles Nest Road/Kiefer Boulevard Intersection (Intersection 28) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS E during the a.m. peak traffic hour with project traffic from the Impact Minimization Alternative. Without project traffic, the intersection would operate acceptably under cumulative (2030) conditions.*

Mitigation Measure 3.14-7t: Participate in Improvements to the Eagles Nest Road/Kiefer Boulevard Intersection (Intersection 28).

IM To ensure that the Eagles Nest Road/Kiefer Boulevard intersection operates at an acceptable LOS D or better, all approaches must be reconfigured to consist of one left-turn lane, two through lanes, and one right-turn lane.

Implementation of Mitigation Measure 3.14-7t would reduce the significant impact on Intersection 28 from the Impact Minimization Alternative under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7u

Unacceptable LOS at the Sunrise Boulevard/International Drive Intersection (Intersection 29) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7u: Participate in Improvements to the Sunrise Boulevard/International Drive Intersection (Intersection 29).

PP, HD, IM To improve LOS at the Sunrise Boulevard/International Drive intersection, the intersection must be reconfigured to consist of three left-turn lanes, three through lanes, and two right-turn lanes. However, even with these improvements, this intersection would operate at an unacceptable LOS. To further improve operations and to fully reduce the impact, aggressive at-grade improvements (such as implementation of a continuous-flow intersection) or partial grade separation is required, consistent with the City's Circulation Element/Plan and associated CIP.

Implementation of Mitigation Measure 3.14-7u would partially reduce the significant impact on Intersection 29 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions. However, implementation of this measure would not reduce the impact to a less-than-significant level. For this intersection to operate at an acceptable LOS and to fully reduce this impact to a less-than-significant level, at-grade or partial grade separation is required. Because the aggressive at-grade treatments have not been designed, they could have geometric and/or environmental constraints that may make the treatments infeasible. Because the feasibility of improvements necessary to fully reduce this impact to a less-than-significant level is unknown, this impact would remain **significant and unavoidable.** If the aggressive at-grade treatments are determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7v

Unacceptable LOS at the Rancho Cordova Parkway/White Rock Road Intersection (Intersection 30) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with or without project traffic under cumulative (2030) conditions. However, project traffic would increase the V/C ratio at this intersection by more than 0.05.*

Mitigation Measure 3.14-7v: Participate in Improvements to the Rancho Cordova Parkway/White Rock Road Intersection (Intersection 30).

PP, HD, IM To improve operations at the Rancho Cordova Parkway/White Rock Road intersection, all of the following improvements are required:

- The northbound and southbound approaches must be reconfigured to consist of three left-turn lanes, three through lanes, and one right-turn lane.
- The southbound approach must be reconfigured to include a free right-turn lane.
- The eastbound and westbound approaches must be reconfigured to consist of three left-turn lanes, four through lanes, and a right-turn lane.

However, these improvements are inconsistent with the City's General Element/Plan. Alternatively, aggressive at-grade improvements (such as implementation of a continuous-flow intersection) or partial grade separation, consistent with the City's Circulation Element/Plan and associated CIP, could be implemented.

Implementation of Mitigation Measure 3.14-7v would reduce the significant impact on Intersection 30 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. Because the aggressive at-grade treatments have not been designed, they could have geometric and/or environmental constraints that may make the treatments infeasible. Because the feasibility of improvements necessary to fully reduce this impact to a less-than-significant level is unknown, this impact remains **significant and unavoidable**. If the aggressive at-grade treatments are determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7w

Unacceptable LOS at the Rancho Cordova Parkway/U.S. 50 Eastbound Ramps Intersection (Intersection 31) under Cumulative (2030) Conditions. *This signalized intersection would operate at an acceptable LOS D during the a.m. peak traffic hours and LOS F during the p.m. peak traffic hours without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio at this intersection by more than 0.05, and would degrade a.m. operations to an unacceptable LOS F.*

Mitigation Measure 3.14-7w: Participate in Improvements to the Rancho Cordova Parkway/U.S. 50 Eastbound Ramps Intersection (Intersection 31).

PP, HD, IM To ensure that the Rancho Cordova Parkway/U.S. 50 eastbound ramps intersection operates at an acceptable LOS, all of the following improvements are required:

- The northbound approach must be reconfigured to consist of two "free" right-turn lanes and two through lanes.
- The southbound approach must be reconfigured to consist of one left-turn lane and two through lanes.

- The eastbound approach must be reconfigured to consist of one shared through/left-turn lane and two "free" right-turn lanes.

Improvements to this intersection must be coordinated with Caltrans.

Implementation of Mitigation Measure 3.14-7w would reduce the significant impact on Intersection 31 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D or better. However, the interchange has not been designed, and because there are geometric constraints associated with U.S. 50, Folsom Boulevard, the LRT tracks, and the Folsom South Canal, these improvements may be infeasible. Additionally, the identified improvements fall under the jurisdiction of Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation.

Given these conditions, this impact would remain **significant and unavoidable.** If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7x

Unacceptable LOS at the Douglas Road/Jaeger Road Intersection (Intersection 33) under Cumulative (2030) Conditions. *Operations at this signalized intersection would degrade from an acceptable LOS to an unacceptable LOS E during the p.m. peak traffic hour with project traffic from the Proposed Project and High Density Alternatives under cumulative (2030) conditions.*

Mitigation Measure 3.14-7x: Participate in Improvements to the Douglas Road/Jaeger Road Intersection (Intersection 33).

PP, HD

Improvements must be made to ensure that the Douglas Road/Jaeger Road intersection operates at an acceptable LOS. Specifically, all of the following improvements should be made:

- The northbound approach should be reconfigured to consist of two left-turn lanes, three through lanes, and a right-turn lane.
- The southbound approach should be reconfigured to consist of two left-turn lanes, three through lanes, and a right-turn lane.
- The eastbound approach should be reconfigured to consist of two left-turn lanes, three through lanes, and one right-turn lane with right-turn capacity enhancement (such as a pork-chop island or right-turn green arrow concurrent with the southbound left-turn phase).
- The westbound approach should be reconfigured to consist of two left-turn lanes, three through lanes, and one right-turn lane.

Implementation of Mitigation Measure 3.14-7x would reduce the significant impact on Intersection 33 from the Proposed Project and High Density Alternatives under cumulative (2030) conditions to a **less-than-significant level**, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7y

Unacceptable LOS at the Douglas Road/Americanos Boulevard Intersection (Intersection 34) under Cumulative (2030) Conditions. *Operations at this signalized intersection would degrade from an acceptable LOS to an unacceptable LOS E during the p.m. peak traffic hour with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7y: Participate in Improvements to the Douglas Road/Americanos Boulevard Intersection (Intersection 34).

PP, HD, IM To ensure that the Douglas Road/Americanos Boulevard intersection operates at an acceptable LOS D or better, a second eastbound right-turn lane must be added.

Implementation of Mitigation Measure 3.14-7y would reduce the significant impact on Intersection 34 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7z

Unacceptable LOS at the Chrysanthy Boulevard/Sunrise Boulevard Intersection (Intersection 35) under Cumulative (2030) Conditions. *This signalized intersection would operate at an acceptable LOS during the a.m. and p.m. peak traffic hours without project traffic under cumulative (2030) conditions. Project traffic would degrade operations during the a.m. peak traffic hour to an unacceptable level.*

Mitigation Measure 3.14-7z: Participate in Improvements to the Chrysanthy Boulevard/Sunrise Boulevard Intersection (Intersection 35).

PP, HD, IM To ensure that the Chrysanthy Boulevard/Sunrise Boulevard intersection operates at an acceptable LOS, a second westbound right-turn lane must be added.

Implementation of Mitigation Measure 3.14-7z would reduce the significant impact on Intersection 35 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS D or better.

IMPACT 3.14-7aa

Unacceptable LOS at the White Rock Road/Americanos Boulevard Intersection (Intersection 39) under Cumulative (2030) Conditions. *Operations at this signalized intersection would degrade from an unacceptable LOS to an unacceptable LOS F during the a.m. and p.m. peak traffic hours with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7aa: Participate in Improvements to the White Rock Road/Americanos Boulevard Intersection (Intersection 39).

PP, HD, IM To ensure that the White Rock Road/Americanos Boulevard intersection operates at an acceptable LOS during the a.m. peak traffic hour, the northbound and southbound approaches must be reconfigured to consist of three left-turn lanes, two through lanes, and a shared through/right-turn lane; and the eastbound and westbound approaches must be reconfigured to consist of one left-turn lane, three through lanes, and two right-turn lanes.

Improvements to this intersection must be coordinated with the County and Aerojet General Corporation (Aerojet).

Implementation of Mitigation Measure 3.14-7aa would reduce the significant impact on Intersection 39 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D or better. However, future north-south connectivity falls under the jurisdiction of the County and may be precluded by operations at Aerojet; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of this improvement. Thus, this impact would remain **significant and unavoidable**. If the County and Aerojet cooperate in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7bb

Unacceptable LOS at the Hazel Avenue/Gold Country Boulevard Intersection (Intersection 40) under Cumulative (2030) Conditions. *This signalized intersection would operate at an unacceptable LOS F during the a.m. and p.m. peak traffic hours with and without project traffic under cumulative (2030) conditions. Project traffic would cause the V/C ratio at this intersection to increase by 0.05 or more during the a.m. peak hour only.*

Mitigation Measure 3.14-7bb: Participate in Improvements to the Hazel Avenue/Gold Country Boulevard Intersection (Intersection 40).

PP, HD, IM To ensure that the Hazel Avenue/Gold Country Boulevard intersection operates at an acceptable LOS, the northbound and southbound approaches must be reconfigured to consist of additional through lanes in the northbound and southbound directions. However, there are significant geographic constraints associated with additional widening of Hazel Avenue, primarily because of the existing bridge crossing of the American River just north of this intersection. Additionally, any roadway widening would require modification to the bluffs between the American River and Fair Oaks Boulevard. Improvements to this intersection must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7bb would reduce the significant impact on Intersection 40 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. Because of the geographic and environmental constraints identified above, this improvement may be infeasible. Additionally, this intersection falls under the jurisdiction of the County. Because of the geographic feasibility constraints and the fact that neither the City nor the project applicant(s) would have control over the timing or implementation of the improvements, this impact would remain **significant and unavoidable.** If Caltrans and the County cooperate in allowing the improvements to move forward, and the improvement is determined to be feasible, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7cc

Unacceptable LOS on International Drive between South White Rock Road and Zinfandel Drive (Roadway Segment 6) under Cumulative (2030) Conditions. *Operations on this roadway segment would degrade from an acceptable LOS C to an unacceptable LOS E with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7cc: Participate in Improvements to International Drive between South White Rock Road and Zinfandel Drive (Roadway Segment 6).

PP, HD, IM Improvements must be made to ensure that International Drive operates at an acceptable LOS between South White Rock Road and Zinfandel Drive; specifically, this roadway segment should be widened to eight lanes. However, the identified improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

An alternative to this improvement is additional connectivity, such as completion of the Kiefer Boulevard extension into Sacramento. This alternative improvement could relieve some traffic from this roadway segment, but would not reduce the impact to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7cc would reduce the significant impact on Roadway Segment 6 under the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS. However, the identified improvement (widening of International Drive) is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes; therefore, the

improvement may not be implemented. Furthermore, the alternative addition of roadway connectivity would not reduce impacts to a less-than-significant level. Additionally, the identified improvements would fall under the jurisdiction of the County, therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of the improvements. Given these conditions, this impact would remain **significant and unavoidable.** If the County cooperates in allowing the identified improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7dd

Unacceptable LOS on Mather Field Road between Folsom Boulevard and U.S. 50 Westbound Ramps (Roadway Segment 12) under Cumulative (2030) Conditions. *Operations at this roadway segment would degrade from an acceptable LOS D to an unacceptable LOS E.*

Mitigation Measure 3.14-7dd: Participate in Improvements to Mather Field Road between Folsom Boulevard and U.S. 50 Westbound Ramps (Roadway Segment 12).

PP, HD, IM Improvements must be made to ensure that Mather Field Road operates at an acceptable LOS between Folsom Boulevard and U.S. 50 westbound ramps; specifically, this roadway segment should have high-access controls.

Implementation of Mitigation Measure 3.14-7dd would reduce the significant impact on Roadway Segment 12 under the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this intersection to operate at an acceptable LOS.

IMPACT 3.14-7ee

Unacceptable LOS on Zinfandel Drive between the U.S. 50 Eastbound Ramps and White Rock Road (Roadway Segment 15) under Cumulative (2030) Conditions. *Operation of this roadway segment would operate at an unacceptable LOS F with or without the project, and the V/C ratio would increase by more than 0.05 with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7ee: Participate in Improvements to Zinfandel Drive between the U.S. 50 Eastbound Ramps and White Rock Road (Roadway Segment 15).

PP, HD, IM Improvements must be made to ensure that Zinfandel Drive operates at an acceptable LOS between the U.S. 50 eastbound ramps and White Rock Road; specifically, this roadway segment should be widened to eight lanes. However, this identified improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

An alternative to this improvement is additional connectivity, such as the completion of Kiefer Boulevard into Sacramento and the extension of Routier Road. This alternative improvement could relieve some traffic from this roadway segment, but would not reduce the impact to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7ee would reduce the significant impact on Roadway Segment 15 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this intersection to operate at an acceptable LOS D or better. This identified improvement (widening of Zinfandel Drive) is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes; therefore, it may not be implemented. Furthermore, the alternative addition of roadway connectivity would not reduce impacts to a less-than-significant level. Additionally, the identified improvements would fall under the jurisdiction of the County, therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of

these improvements. Given these conditions, this impact would remain **significant and unavoidable.** If the County cooperates in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7ff

Unacceptable LOS on Sunrise Boulevard between Gold Country Boulevard and Coloma Road (Roadway Segment 17) under Cumulative (2030) Conditions. *This roadway segment would operate at an unacceptable LOS F with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-7ff: Participate in Improvements to Sunrise Boulevard between Gold Country Boulevard and Coloma Road (Roadway Segment 17).

PP, HD, IM

Improvements must be made to improve operation on Sunrise Boulevard between Gold Country Boulevard and Coloma Road; specifically, this roadway segment should be widened to eight lanes. The identified improvement would more than offset the impacts specifically related to the Rio del Oro project on the roadway segment. However, because of other development in the region that would substantially increase traffic levels, the roadway segment would continue to operate at an unacceptable LOS even with the capacity improvements identified to mitigate Rio del Oro impacts. The identified improvement is consistent with the County Mobility Study; however, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes. Moreover, without additional river crossings, there are no parallel capacity improvements to relieve Sunrise Boulevard on this segment. Additional river crossings would result in significant environmental effects (i.e., loss of riparian habitat and loss of structures).

Implementation of Mitigation Measure 3.14-7ff would reduce the significant impact on Roadway Segment 17 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level by offsetting impacts of project traffic. However, because the improvement (widening of Sunrise Boulevard) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented, and because the potential for additional river crossings is limited and would require coordination and approval by other regulatory agencies in which neither the City nor project applicant(s) have any control over the timing or implementation of additional river crossings, this impact would remain **significant and unavoidable.**

IMPACT 3.14-7gg

Unacceptable LOS on Sunrise Boulevard between Coloma Road and the U.S. 50 Westbound Ramps (Roadway Segment 18) under Cumulative (2030) Conditions. *This roadway segment would operate at an unacceptable LOS F with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-7gg: Participate in Improvements to Sunrise Boulevard between Coloma Road and the U.S. 50 Westbound Ramps (Roadway Segment 18).

PP, HD, IM

Improvements must be made to improve operation on Sunrise Boulevard between Coloma Road and the U.S. 50 westbound ramps; specifically, this roadway segment should be widened to eight lanes. The identified improvement would more than offset the impacts specifically related to the Rio del Oro project on this roadway segment. However, because of other development in the region that would substantially increase traffic levels, this roadway segment would continue to operate at an unacceptable LOS even with the capacity improvements identified to mitigate Rio del Oro impacts. The identified improvement is consistent with the County Mobility Study; however, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes. Moreover, without additional river crossings, there are no parallel capacity improvements to relieve Sunrise Boulevard on this segment.

Implementation of Mitigation Measure 3.14-7gg would reduce the significant impact on Roadway Segment 18 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level by offsetting impacts of project traffic. However, because the improvement (widening of Sunrise Boulevard) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented, and because the potential for additional river crossings is limited and would require coordination and approval by other regulatory agencies in which neither the City nor project applicant(s) have any control over the timing or implementation of additional river crossings, this impact would remain **significant and unavoidable**.

IMPACT 3.14-7hh

Unacceptable LOS on Sunrise Boulevard between the U.S. 50 Eastbound Ramps and Folsom Boulevard (Roadway Segment 19) under Cumulative (2030) Conditions. *Operation of this roadway segment would degrade from an acceptable LOS D to an unacceptable LOS F with project traffic under cumulative conditions.*

Mitigation Measure 3.14-7hh: Participate in Improvements to Sunrise Boulevard between the U.S. 50 Eastbound Ramps and Folsom Boulevard (Roadway Segment 19).

PP, HD, IM Improvements must be made to ensure that Sunrise Boulevard operates at an acceptable LOS between the U.S. 50 eastbound ramps and Folsom Boulevard; specifically, this roadway segment should be widened to eight lanes. With implementation of this identified improvement, this segment would operate at an acceptable LOS, and the improvement is consistent with the County Mobility Study; however, it is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

Implementation of Mitigation Measure 3.14-7hh would reduce the significant impact on Roadway Segment 19 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this roadway segment to operate at an acceptable LOS D or better. However, because the improvement (widening of Sunrise Boulevard) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented, this impact would remain **significant and unavoidable.**

IMPACT 3.14-7ii

Unacceptable LOS on Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20) under Cumulative (2030) Conditions. *Operation of this roadway segment would degrade from an acceptable LOS B to an unacceptable LOS E with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7ii: Participate in Improvements to Sunrise Boulevard between Folsom Boulevard and White Rock Road (Roadway Segment 20).

PP, HD, IM Improvements must be made to ensure that Sunrise Boulevard operates at an acceptable LOS between Folsom Boulevard and White Rock Road; specifically, this roadway segment should be widened to eight lanes. With implementation of this identified improvement, this segment would operate at an acceptable LOS, but the improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes.

Implementation of Mitigation Measure 3.14-7ii would reduce the significant impact on Roadway Segment 20 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this roadway segment to operate at an acceptable LOS D or better. However, because this identified improvement (widening of Sunrise Boulevard) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented, the impact would remain **significant and unavoidable.**

IMPACT 3.14-7jj

Unacceptable LOS on Hazel Avenue between Winding Way and the U.S. 50 Westbound Ramps (Roadway Segment 23) under Cumulative (2030) Conditions. *This roadway segment would operate at an unacceptable LOS F with or without project traffic under cumulative (2030) conditions. Project traffic would increase the V/C ratio by more than 0.05.*

Mitigation Measure 3.14-7jj: Participate in Improvements to Hazel Avenue between Winding Way and the U.S. 50 Westbound Ramps (Roadway Segment 23).

PP, HD, IM To improve operation on Hazel Avenue between Winding Way and the U.S. 50 westbound ramps, this roadway segment must be widened to eight lanes. Improvements to this roadway segment must be coordinated with the County.

The identified improvement would more than offset the impacts specifically related to the Rio del Oro project on this roadway segment. However, because of other development in the region that would substantially increase traffic levels, this roadway segment would continue to operate at an unacceptable LOS even with the capacity improvements identified to mitigate Rio del Oro impacts.

Implementation of Mitigation Measure 3.14-7jj would reduce the significant impact on Roadway Segment 23 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions, by offsetting impacts of project traffic. However, the identified improvement falls under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over its timing or implementation. Thus, this impact would remain **significant and unavoidable.** If the County cooperates in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7kk

Unacceptable LOS on U.S. 50 between Mather Field Road and Zinfandel Drive (Freeway Segment 27); between Sunrise Boulevard and Rancho Cordova Parkway (Freeway Segment 29); between Rancho Cordova Parkway and Hazel Avenue (Freeway Segment 30); and between Hazel Avenue and Folsom Boulevard (Freeway Segment 31) under Cumulative (2030) Conditions. *These segments would operate at an unacceptable LOS F with or without project traffic under cumulative (2030) conditions. Project traffic would exacerbate these unacceptable operations.*

Mitigation Measure 3.14-7kk: Participate in Improvements to U.S. 50 between Mather Field Road and Zinfandel Drive (Freeway Segment 27); between Sunrise Boulevard and Rancho Cordova Parkway (Freeway Segment 29); between Rancho Cordova Parkway and Hazel Avenue (Freeway Segment 30); and between Hazel Avenue and Folsom Boulevard (Freeway Segment 31).

PP, HD, IM To ensure that these freeway segments operate at an acceptable LOS, all of the following improvements are required:

- Ramp metering must be implemented on the Mather Field Road and Zinfandel Drive eastbound on-ramps.
- Auxiliary lanes must be constructed from Mather Field Road, Sunrise Boulevard, and Rancho Cordova Parkway.
- Traffic-signal timing at freeway interchanges must be coordinated with adjacent City intersections to minimize impacts of vehicle queue spillback onto U.S. 50.
- Parallel facilities to U.S. 50 must be constructed, including improvements to SR 16, extension of International Drive into and through the project site, extension of Kiefer

Boulevard, construction of Easton Valley Parkway, and connectivity of International Drive to Old Placerville Road.

- HOV lanes must be extended from Sunrise Boulevard to downtown Sacramento (or, as an interim project, to Watt Avenue).
- HOV enhancements to existing interchanges must be provided, such as bypass lanes at existing metered on-ramps.

Improvements to these freeway segments must be coordinated with Caltrans.

Implementation of Mitigation Measure 3.14-7kk would reduce the significant impact from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing these freeway segments to operate at an acceptable LOS. The Circulation Element/Plan in the City General Plan and the City's CIP include many of the improvements identified above. However, these required improvements fall under the jurisdiction of Caltrans; therefore, neither the City nor the project applicant(s) would have control over their timing or implementation. Thus, this impact would remain **significant and unavoidable**. If Caltrans cooperates in allowing the improvements to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7ll

Unacceptable LOS on Sunrise Boulevard between Douglas Road and Chrysanthy Boulevard (Roadway Segment 43) under Cumulative (2030) Conditions. *Operations on this roadway segment would degrade from an acceptable LOS D to an unacceptable LOS F, and the V/C ratio would increase by 0.05 or more, with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7ll: Participate in Improvements to Sunrise Boulevard between Douglas Road and Chrysanthy Boulevard (Roadway Segment 43).

PP, HD, IM

Improvements must be made to ensure that Sunrise Boulevard operates at an acceptable LOS D or better between Douglas Road and Chrysanthy Boulevard; specifically, this roadway segment should be widened to eight lanes. With implementation of this improvement, this segment would operate at an acceptable LOS; however, the improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes or fewer.

An alternative to this improvement is additional connectivity, such as the extensions of Chrysanthy Boulevard to Kiefer Boulevard, Jaeger Road to Grant Line Road, and Kiefer Boulevard to Sacramento. This alternative improvement has the potential to relieve traffic from this roadway segment and reduce the impact to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County.

Implementation of Mitigation Measure 3.14-7ll would reduce the significant impact on Roadway Segment 43 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level, by allowing this roadway segment to operate at an acceptable LOS D or better. However, this identified improvement (widening of Sunrise Boulevard) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented. Furthermore, the necessary alternative addition of roadway connectivity falls under the jurisdiction of the County; therefore, neither the City nor the project applicant(s) would have control over its timing or implementation. Thus, this impact would remain **significant and unavoidable**. If the County cooperates in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7mm

Unacceptable LOS on Rancho Cordova Parkway between Easton Valley Parkway and White Rock Road (Roadway Segment 47) under Cumulative (2030) Conditions. *Operations on this roadway segment would degrade from an acceptable LOS D to an unacceptable LOS F with project traffic under cumulative (2030) conditions.*

Mitigation Measure 3.14-7mm: Participate in Improvements to Rancho Cordova Parkway between Easton Valley Parkway and White Rock Road (Roadway Segment 47).

PP, HD, IM

To improve operation on Rancho Cordova Parkway between Easton Valley Parkway and White Rock Road, this roadway segment must be widened to eight lanes. The identified improvement would more than offset the impacts specifically related to the Rio del Oro project on this roadway segment. However, because of other development in the region that would substantially increase traffic levels, this roadway segment would continue to operate at an unacceptable LOS even with the capacity improvements identified to mitigate Rio del Oro impacts. Furthermore, this improvement is inconsistent with the City's Circulation Element/Plan because City policy requires a maximum roadway cross section of six lanes or fewer.

An alternative to this improvement is additional connectivity, such as the extension of Chrysanthy Boulevard to Kiefer Boulevard, the extension of Jaeger Road to Grant Line Road, the extension of Kiefer Boulevard to Sacramento, and additional connectivity through the Aerojet site. This alternative improvement has the potential to relieve traffic from this roadway segment, but would not reduce the impact to a less-than-significant level.

Improvements to this roadway segment must be coordinated with the County and Aerojet.

Implementation of Mitigation Measure 3.14-7mm would reduce the significant impact on Roadway Segment 47 from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions, to a less-than-significant level by offsetting impacts from project traffic. However, the identified improvement (widening Rancho Cordova Parkway) is inconsistent with the City's Circulation Element/Plan and therefore may not be implemented. Furthermore, the alternative roadway connectivity would not reduce the project impact to a less-than-significant level. Additionally, the necessary alternative addition of roadway connectivity falls under the jurisdiction of the County and Aerojet; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of the improvements. For these reasons, this impact would remain **significant and unavoidable.** If the County and Aerojet cooperate in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

IMPACT 3.14-7nn

Unacceptable LOS on Rancho Cordova Parkway between White Rock Road and Douglas Road (Roadway Segment 48) under Cumulative (2030) Conditions. *Operations on this roadway segment would degrade from an acceptable LOS A to an unacceptable LOS E with project traffic from the High Density and Impact Minimization Alternatives under cumulative (2030) conditions.*

Mitigation Measure 3.14-7nn: Participate in Improvements to Rancho Cordova Parkway between White Rock Road and Douglas Road (Roadway Segment 48).

HD, IM

To ensure that Rancho Cordova Parkway operates at an acceptable LOS D or better between White Rock Road and Douglas Road, high-access control must be implemented on this roadway segment.

Implementation of Mitigation Measure 3.14-7nn would reduce the significant impact on Roadway Segment 48 from Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a **less-than-significant** level, by allowing this roadway segment to operate at an acceptable LOS D or better.

IMPACT 3.14-7oo

Unacceptable LOS on Americanos Boulevard between White Rock Road and Douglas Road (Roadway Segment 50) under Cumulative (2030) Conditions. *Operations on this roadway segment would degrade from an acceptable LOS to an unacceptable LOS E with project traffic from the High Density Alternative under cumulative (2030) conditions.*

Mitigation Measure 3.14-7oo: Participate in Improvements to Americanos Boulevard between White Rock Road and Douglas Road (Roadway Segment 50).

HD To ensure that Americanos Boulevard operates at an acceptable LOS D or better between White Rock Road and Douglas Road, this roadway segment must have high-access control.

Implementation of Mitigation Measure 3.14-7oo would reduce the significant impact on Roadway Segment 50 from the High Density Alternative under cumulative (2030) conditions to a **less-than-significant** level, by allowing this roadway segment to operate at an acceptable LOS.

IMPACT 3.14-7pp

Unacceptable LOS at Various Merge, Diverge, and Weave Segments of U.S. 50 under Cumulative (2030) Conditions. *The following merge, diverge, and weave segments of U.S. 50 would operate at an unacceptable LOS F with and without project-related traffic from all three development alternatives under cumulative (2030) conditions:*

- Eastbound U.S. 50
  - Mather Field Road direct off-ramp, diverge
  - Sunrise Boulevard direct off-ramp, diverge (p.m. peak traffic hour only)
  - Sunrise Boulevard loop/direct on-ramp, merge
  - Rancho Cordova Parkway direct on-ramp, merge
  - Rancho Cordova Parkway direct off-ramp, diverge
  - Hazel Avenue direct off-ramp, diverge
  - Hazel Avenue loop/direct on-ramp, weave (a.m. peak traffic hour only)
  - Aerojet direct off-ramp, weave (a.m. peak traffic hour only)
- Westbound U.S. 50
  - Hazel Avenue direct off-ramp, diverge
  - Hazel Avenue loop on-ramp, merge
  - Rancho Cordova Parkway direct off-ramp, diverge
  - Rancho Cordova Parkway loop on-ramp, merge
  - Sunrise Boulevard direct off-ramp, diverge (p.m. peak traffic hour only)
  - Zinfandel Drive direct on-ramp, merge
  - Mather Field Road direct off-ramp, diverge (a.m. peak traffic hour only)
  - Mather Field Road loop on-ramp, merge (a.m. peak traffic hour only)
  - Mather Field Road direct on-ramp, merge

The addition of project-related traffic under cumulative conditions would cause the following unacceptable LOS changes at U.S. 50 merge and diverge segments:

- Eastbound U.S. 50
  - Zinfandel Drive direct off-ramp, diverge—would degrade from LOS C to LOS F during the a.m. peak traffic hour under the Proposed Project and High Density Alternatives

Mitigation Measure 3.14-7pp: Participate in Improvements to U.S. 50 Merge, Diverge, and Weave Segments.

PP, HD, IM To ensure that the U.S. 50 merge, diverge, or weave areas operate at an acceptable LOS, the following improvements to the U.S. 50 corridor are required:

- Ramp metering must be added on the Mather Field Road and Zinfandel Drive eastbound on-ramps.
- An auxiliary lane must be constructed from Mather Field Road and Sunrise Boulevard.
- Traffic-signal timing at freeway interchanges must be coordinated with adjacent City intersections to minimize impacts of vehicle queue spillback onto U.S. 50.
- Parallel facilities to U.S. 50 must be constructed, including improvements to SR 16, extension of International Drive into and through the project site, extension of Kiefer Boulevard, construction of Easton Valley Parkway, and connectivity of International Drive to Old Placerville Road.
- HOV lanes must be extended from Sunrise Boulevard to downtown Sacramento (or, in an interim project, to Watt Avenue).
- HOV enhancements to existing interchanges must be provided, such as bypass lanes at existing metered on-ramps.

Improvements to these merge, diverge, and weave areas must be coordinated with Caltrans and the County.

Implementation of Mitigation Measure 3.14-7pp would aid in reducing the significant impact from the Proposed Project, High Density, and Impact Minimization Alternatives under cumulative (2030) conditions to a less-than-significant level. The Circulation Element/Plan in the City General Plan and the City's CIP include many of the improvements identified above.

However, several of the identified improvements fall under the jurisdiction of Caltrans and the County; therefore, neither the City nor the project applicant(s) would have control over the timing or implementation of the improvements. Thus, this impact would remain **significant and unavoidable.** If Caltrans, the County, and Aerojet cooperate in allowing the improvement to move forward, the impact would be classified as significant in the short term but eventually would be reduced to a less-than-significant level in the long term.

3.14.4 RESIDUAL SIGNIFICANT IMPACTS

The Proposed Project, High Density, Impact Minimization, and No Federal Action Alternatives would increase traffic on area roadways, regardless of whether or not the proposed International Drive realignment option is incorporated into the project. This impact would remain significant and unavoidable for baseline and cumulative (2030) conditions.